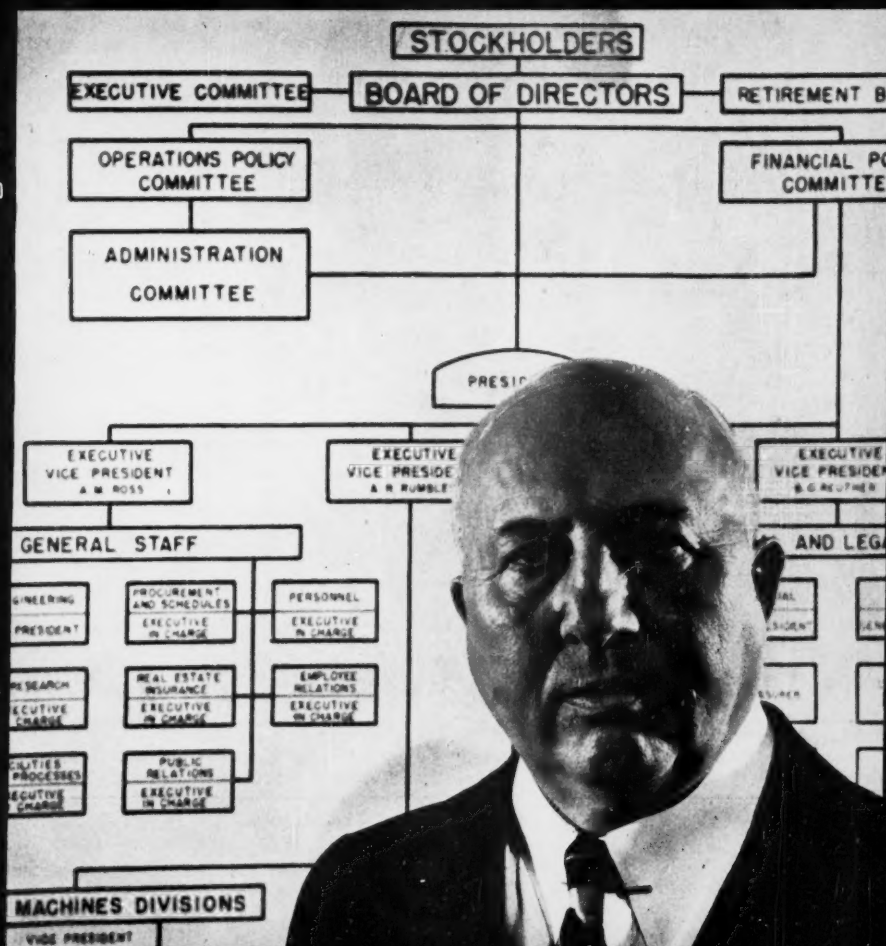


BUSINESS WEEK

NOV. 12, 1949

A MCGRAW-HILL PUBLICATION



James H. Rand, Jr.: A new family tree for Remington Rand (pages 6, 36)

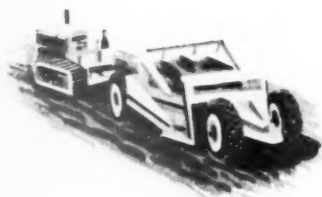
The Fight Against Big Industry

PAGE 26

TWENTY-FIVE CENTS

BUSINESS
WEEK
INDEX

BOWER BEARINGS ARE



SO MUCH DEPENDS ON THE BEARINGS

No one realizes more fully than your engineers that to a large degree their equipment is no better than its bearings. ☆ A product may excel in design and construction, surpass all competition in workmanship. But that is not enough. Its bearings, too, must be built to meet today's ever-higher standards of performance. They must be equal to the most punishing kind of use, must stand up day in and day out with little or no maintenance. ☆ To fill these exacting demands has been Bower's sole objective. That is why Bower Spher-O-Honed bearings represent today's highest achievement in bearing design and manufacture. You will find them without equal for your product.

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BOWER
ROLLER BEARINGS



THE MAN WHO WALKED AGAIN



1. Hit by locomotive while supervising a construction job, Lester Durning, Secretary-Treasurer of W. J. Storen Co., Detroit, lost both legs below the knee. On January 3, he entered the Liberty Mutual Rehabilitation Center.



2. To develop leg muscles which had wasted away through disuse, Physical Therapist Katherine Leary started him exercising for thirty minutes a day on pulley weights especially adapted for use in a sitting position.



3. Within the first three weeks, his left leg was fitted with an artificial limb by Liberty Mutual specialists. Always cheerful and cooperative, Mr. Durning began immediately to substitute rails for the wheel chair wherever possible.



7. In anticipation of using public conveyances again, he practiced getting on and off street cars, busses and trains on simulated steps at the Rehabilitation Center. Steps are of varied height—but Mr. Durning mastered them quickly.



8. Occupational Therapist Polly Ryder supervised horseshoe pitching. Such recreation (begun in mid-April) increased his weight-bearing, helped endurance and balance, provided walking and bending exercises.



9. A belt-driven, foot-operated jig saw provided even more active exercise and at the same time helped him turn out a what-not shelf. He was quickly gaining power, confidence and proficiency in the use of his artificial legs.

*{ The inspiring story of a double amputee and
his courageous fight to regain a normal life }*



4. Turnabout! In another three weeks, the right leg was fitted, and Mr. Durning was pushing his Physical Therapist in the wheel chair — and at the same time improving his stability, balance and gait.



5. The mirrored amputee walk was designed for visual gait training. It permitted Mr. Durning to see his posture, observe his balance and watch the position of his feet. Treatments now were longer and improvement was rapid.



6. Two canes were given him in March. But once he had acquired balance and poise, he carried only one. He expressed feeling if he had not come to the Liberty Mutual Rehabilitation Center, he might never have walked.



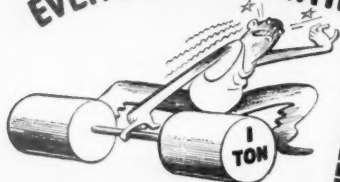
10. Returning to work May 26, he called on S. Bruce Black, President of Liberty Mutual, to express his appreciation. When he forgot his cane, Mr. Black asked if he still needed it. Mr. Durning replied, "Only to ward off dogs."

This is the story of a man who arrived in Boston in a wheelchair—and left it behind him to continue a useful life. It gives heartening proof that human values can be saved through skilled rehabilitation. Founded in 1943, our Rehabilitation Center in Boston has developed under medical direction techniques to restore injured workers to employment. So far 1230 seriously injured men and women have been treated. Of those whose treatment has been completed, 860 have returned to work. Rehabilitation is another way in which Liberty Mutual helps workers live safer, more secure lives.



We work to keep you safe . . . by protecting business, home and car owners from crippling loss . . . by removing the causes of accidents . . . by relieving the pain and financial burden of accidents by prompt, fair and friendly handling of all claims.

EVER LIFT A TON WITH YOUR FINGER



it's easy with
MOBILIFT

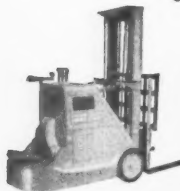


Three little easy-to-operate levers at fingertip level do all the work on a Mobilift. One hoists loads of a ton or more up to ceiling height. Another controls the tilt of the load. A third lever regulates the machine's travel speed. To make Mobilift even easier to operate it has no gears to shift—going forward or backward at the touch of a lever.

Such ease of operation has built Mobilift a reputation as the most maneuverable of all lift trucks—more trips per hour, more tons of materials per day. Let us show you why Mobilift's easy handling makes such a hit with both warehouse operators and business executives.

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BUSINESS WEEK • Nov. 12, 1949



Custom Tailored

LONG DISTANCE CALLS

*Made to Your Measure
in Less Than Two Minutes*

IT WOULD BE NICE if we could keep a lot of ready-made Long Distance calls waiting in neat rows for you to take your pick. But it won't work that way.

You need too many sizes. Today, it's a 100-mile or 1000-mile call. Tomorrow, it may be our special 2947-mile size (the longest possible call in continental U.S.).

Whenever you call, wherever you call, we make it to your measure and deliver it in less than two minutes on the average!

It takes lots of planning to do such careful tailoring. It takes a lot of equipment. And it takes the skill and experience of many, many people.

Long Distance service grows steadily faster and better. And it's *friendly* service all the way.



BELL TELEPHONE SYSTEM

"IN PARTNERSHIP" WITH Leading Builders of Powered Equipment

Continental Motors' Red Seal trademark has stood as an emblem of quality ever since the dawn of this automotive age.

It was helping to sell cars, and keep them sold, long before the advent of such things as comfort and style—back in the days when the prospective buyer asked just one thing: "Will it run?" Word got 'round early that the engine with the Red Seal name plate *ran*—and that it kept on running for a long, long time.

The statement applies with greater force now than ever. Continental Motors has not only kept abreast of technological progress, but has constantly expanded its line to meet changing needs.

Today, the company's "partnership" with leaders in industry spans a broad and diversified range of power applications. Red Seal engines are building acceptance and prestige for manufacturers, not only of vehicles, but of farm tractors and implements, industrial trucks, conveyors and materials-handling devices, pumps, mixers, compressors and other street and highway building and maintenance equipment, construction machinery, personal and executive airplanes, and marine craft of various types. The list of Continental customers stands at an all-time high.

To those customers, the makers of Red Seal-powered equipment, as well as to *their* customers, whose preference guides the choice, I add my personal pledge to the pledge of our Continental family, that Red Seal quality pre-eminence will be zealously maintained.


President



Continental Motors Corporation
MUSKEGON, MICHIGAN

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THE COVER

James H. Rand, Jr., was 29 years old when he founded the Rand Systems Corp., back in 1915. His chief assets at the time were his own patent on the Kardex cabinet and a \$10,000 loan.

In a year, the loan was repaid. In five years, the company had hit an annual sales volume of \$1-million. Last year, Rand's company, plus the considerable handful of companies with which it had merged under the name Remington Rand, Inc., sold its products and services for \$148-million.

• **New Yorker**—Rand was born in North Tonawanda, N. Y., a Buffalo suburb. After he finished high school he worked in New York City as a salesman for a year. Then he went to Harvard, where he played varsity football, boxed—and studied, getting his B.A. in 1908.

His first postcollege job was in Boston's Bridges Specialty Co., as a benchworker. A year later, Rand went into the Middle West as a manufacturer's representative. There he handled a variety of lines, including the loose-leaf ledgers manufactured by his father's Rand Co.

About a year later, in 1910, Rand returned East, did a five-year stint with his father's company. And in 1915, Rand decided to go into business for himself.

For the next ten years, there were two Rand-operated companies in the office-equipment field: young Rand's and his father's. Then, in 1925, the two joined forces—the first in the series of mergers which, by 1927, had formed the Remington Rand Co.

• **Avocations**—Today, at 62, Rand lives in Darien, Conn., spreads his interests broadly enough to include, in addition to business, boating and medical research. His efforts in this last-named activity caused Admiral Ross T. McIntyre to say of him: "The research which James Rand endowed revolutionized the Navy's treatment of pneumonia and pulmonary diseases."

—Complete story of Remington Rand reorganization on page 36.



HOW NYLON MAKES MISERS OUT OF BUSINESS MACHINES

Here's a use of Du Pont nylon fibers that can benefit *every* business: nylon ribbons for typewriters and other business machines.

The constant hammering of sharp keys is hard on ordinary ribbons. It wears them thin . . . eventually knifes right through. Hard-hammering electric machines are especially tough on ribbons . . . require frequent changes to avoid fuzzy and hard-to-read letters.

Tough, durable nylon ribbons outlast all other kinds. Wear life is calculated in months instead of days or weeks—giving an important reduction in ribbon costs. One test on a constantly used electric machine showed an actual saving of \$5.99

over a period of two months! Another nylon ribbon on test is still in use after 5½ months!

And they produce extremely sharp, clear impressions. That's because nylon's strength makes possible a thinner ribbon . . . nylon's resiliency allows the ribbon to conform readily to the type face. And nylon ribbons are lint-free.

. . .

Can nylon solve a problem for you . . . by making a better product, a new product, or improving production methods? Nylon offers toughness coupled with durability, strength and lightness, elasticity and resiliency. Nylon resists deterioration by mildew, soil and marine rot, petro-

leum oils and alkalies. You can "heat set" it to hold shape.

Write for 32-page booklet, "Nylon Textile Fibers in Industry." And tell us your fiber or fabric problems. Room 6510-V, Nylon Division, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.

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NYLON FIBERS



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... THROUGH CHEMISTRY

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OUTSTANDING JOB



Air . . . over 14 tons a minute . . . for the world's largest boiler to be installed at Consolidated Edison's Hudson Avenue Station . . . Westinghouse Sturtevant Forced and Induced Draft fans will handle this amazing air moving job. These efficient fans are newest among 150 now in use by Consolidated Edison. For *your* job too, whether large or small . . . consulting engineers recognize the dependability and efficiency of Sturtevant air handling equipment.

For example . . .

OUTSTANDING PRODUCT



THE TURBOVANE® 10 . . .

. . . is the latest in fans for Forced Draft duty. This means economical operation and low maintenance for *your* air moving job.

OUTSTANDING RANGE

EVERYTHING THAT PUTS AIR TO WORK FOR EVERY APPLICATION

Whether you want equipment for air moving, air cleaning, air conditioning, or other air-at-work jobs . . . look to Westinghouse first. **YOU CAN BE SURE** you'll get the right type—the right capacity to do *your* job . . . with the fastest investment return that advanced engineering can provide. The reputation of the Sturtevant Division of Westinghouse has been built up through the years in efficiently putting air to work. Call our nearest local office whenever you need sound advice on putting air to work. Or, write Westinghouse Electric Corporation, Sturtevant Division, Hyde Park, Boston 36, Mass.

YOU CAN BE SURE...IF IT'S **Westinghouse**

BUSINESS OUTLOOK

BUSINESS WEEK
NOVEMBER 12, 1949



Most businessmen now are looking into 1950. That was more than ever true this week as the labor situation continued to improve.

But there are some hurdles to clear between now and the New Year.

Foremost comes retail trade. Christmas buying, up to this week, was alarmingly slow. It has to pick up rapidly to meet expectations.

If it falls short of expectations, 1950 will be off to a poor start.

Aftermath of a poor fall: New York stores advertised big election-day sales of women's coats which hadn't moved because of warm weather.

To help out, there had been a snap in Gotham's air for several days. The payoff: You couldn't get into coat departments for the crowds.

Slow store sales already are having some kickback on textiles. Output isn't affected, but new orders are sluggish.

Some slowing, of course, probably is natural. The autumn pickup was enough to take mill men's hats off. They have been taking orders through the first quarter of 1950 and right into the second.

That's dangerous. If remaining Christmas sales don't show a sharp improvement, textile converters won't be nearly so anxious to take delivery as they were when they scrambled to buy so far ahead.

There's one thing to ease worries in textiles now that wasn't true a year ago. Nobody expects prices of standard merchandise to come down. They may buy cautiously, but it's just to keep inventory in line.

One price sustainer, incidentally, will be the new 75¢ minimum wage.

Demand for steel will have a lot to do with shaping plans for 1950.

Approximately six to seven weeks' output will be lost before operations get back to anything like normal. That's between 9-million and 10-million tons of ingot at the prestrike operating rate.

Today's biggest question is just how much of the steel output, lost during the strike, has to be made up.

We haven't seen a "natural" steel rate in months. It tumbled last spring as users cut inventories. It recovered to around 85%, but a lot of that was being stored against the strike.

During the strike, output shrank to 8%. This week it was back up to about 22% as Bethlehem got going. In December, it may well top 90%.

But Chicago's Northern Trust, in its November letter, cautions: "Although . . . the steel industry may operate for a time at a higher rate than if the strike had not occurred, there will undoubtedly be less steel produced over-all than if the strike had not happened."

Common stock financing may come back into style one of these days.

The stockholder no longer is the forgotten man—particularly if he owns General Motors common. This week's G.M. dividend of \$4.25 a share was the financial news highlight of the year to date.

And G.M.'s management pointed out specifically that it was time the owners of the business got a better share of postwar prosperity.

Bigger dividends are likely to continue for quite a while.

Not all companies will be able to raise their dividend payments; yet

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
NOVEMBER 12, 1949

a majority has been able to do so thus far in 1949 (BW—Nov. 5'49, p71).

•
Good dividends and liberal yields offer the best chance for the stock market to break out of its three-year rut.

Prices now just about equal their 1948 high. But the yield on a representative list of industrials, which stood at less than $5\frac{1}{2}\%$ at the 1948 top, now is better than 6%.

That measures the increase in dividend payments in a year and a half. And it accounts, too, for a number of new investors in the market.

They're interested in yield more than in appreciation. And it is hard to buy even a 3% yield in the bond market.

•
Behind the better dividend payments are some basic changes in the state of corporate finances.

To start with, earnings are behind last year. They may dip a little more in 1950. Ordinarily, this would cause dividend cutting.

But companies are in a better position to pay. They have pared inventories and accounts receivable. A lot of the cash realized has been used to reduce floating debt. Working capital is up (BW—Oct. 15'49, p105).

More than anything, though, the most urgent spending for plant and equipment is over; so large a slice of profits need not now be plowed back.

•
Next problem for many finance officers is to decide when the time is ripe to market common stock. A lot of postwar expansion and modernization should be capitalized through equities and bonds retired.

It's tough to think of having to offer stock at prices to yield anywhere from 6% to 10%. Yet that may be necessary.

Underwriters, incidentally, are eager to put the market to a test.

Despite high taxes, they think they can find stock buyers. There is enough markup in stocks (unlike bonds) for them to turn salesmen loose with this order: "Go find the people who have never bought stocks before."

•
Rug and carpet prices are on the way up again. Alexander Smith & Sons Carpet Co. this week posted advances of 6% to 7%.

And, from the profit showing of some of the companies, the revival in demand and higher prices is coming none too soon.

The Smith concern had a third quarter deficit of \$451,641 against a profit of \$1,604,771 in the like 1948 quarter; Artloom lost \$44,850 against a profit of \$219,650; Bigelow-Sanford had a net of only \$61,499 against last year's \$1,296,962.

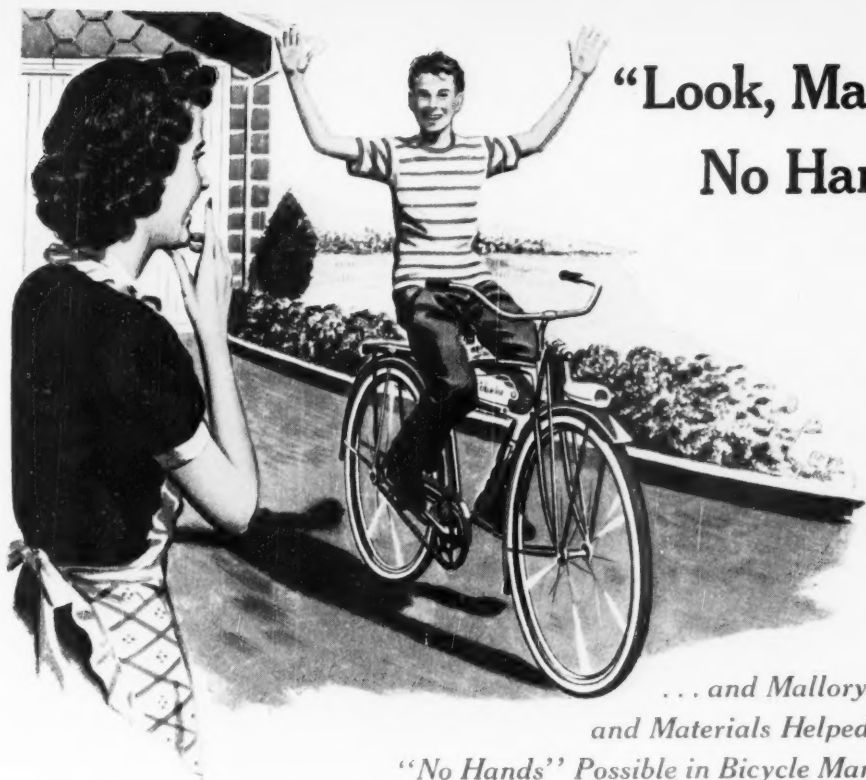
Principal trouble this year was the sudden drop in demand. But high prices for carpet wool are cited as a reason for the price advance.

•
Each new crop report seems to add to the surplus problem in cotton. Last month, the government raised its estimate about half a million bales (BW—Oct. 15'49, p10). This week it added another 100,000.

The latest figure is 15,524,000 bales. That should come pretty close to the final outturn, as the crop is now about 60% ginned.

•
Real estate circles are watching closely the rentals in new office buildings. If these should be disappointing, several structures now planned may be delayed—and gossip is that rentals aren't too brisk. •

A fair amount of space in old buildings finally is opening up.



**"Look, Ma,
No Hands!"**

*... and Mallory Methods
and Materials Helped to Make
"No Hands" Possible in Bicycle Manufacture*

The making of bicycles, too, has become more than ever a "no hands" operation, due in large part to resistance welding and Mallory designs and materials which have contributed so much to the efficiency of this process.

One prime example is Arnold, Schwinn & Co. who faced the problem of stepping up production, even further improving the rugged quality for which they have become famous. Schwinn engineers found that resistance welding—faster, surer, less costly—could take the place of older manual methods. Now all Schwinn bicycle frames and rims are resistance welded, using Mallory-designed electrodes and dies. The result—more automatic operations, absolute quality control at far greater rates of production.

From milk cans to streamlined trains, numerous instances could be cited of better products at lower costs resulting from Mallory resistance welding achievements. Mallory has produced welding electrodes, holders and dies that have set new records for longer life and lower costs per weld.

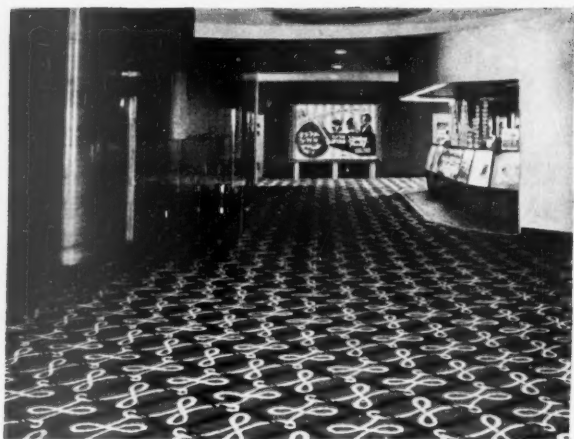
In other phases of metallurgy, and in the fields of electronics and electrochemistry, Mallory creative research and precision ideals have contributed greatly to the perfection of products and processes that make possible our modern way of life.

If you have a design or production problem that falls within the scope of Mallory activities, you should consult with Mallory engineers now. What they have done for others, they can do for you.

MALLORY

SERVING INDUSTRY with Capacitors • Condensers • Controls
• Rectifiers • Switches • Vibrators • Power Supplies •
Resistance Welding Materials

P. R. MALLORY & CO., Inc., INDIANAPOLIS 6, INDIANA



Strand Theatre, Milwaukee, Wisconsin

Roosevelt Hotel, New York, N. Y.

A good "front" pays off
in today's competitive market



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You can do new-business wonders with smart, colorful carpet... give gloomy areas sparkle... make small areas seem larger... endow your entire establishment with a more inviting, money-spending atmosphere. The many Alexander Smith and C. H. Masland weaves and patterns offer you an amazingly wide choice. Your nearest Smith-Masland contract carpet representative will put his years of experience to work for you... help you cut corners in time and cost. Call him in today. Or write Alexander Smith-Masland Contract Department, 295 Fifth Avenue, New York 16, N. Y.

Mission Inn, Los Angeles, California

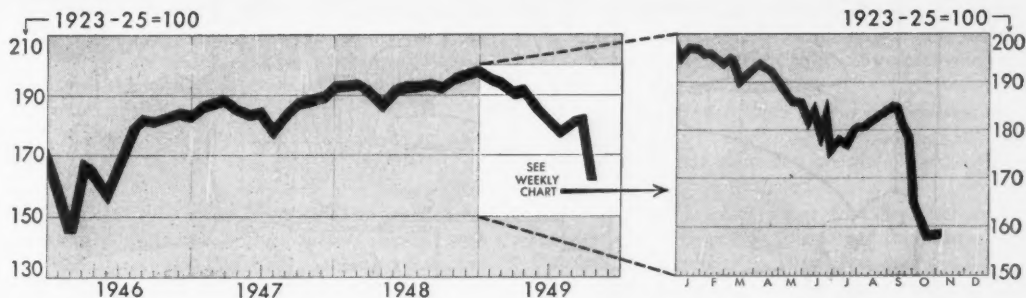


**Alexander Smith
and
C.H. Masland**

CONTRACT CARPETS

295 Fifth Avenue, New York 16, New York

FIGURES OF THE WEEK



Business Week Index (above) *159.4 †159.3 164.6 197.9 162.2

PRODUCTION

Steel ingot operations (% of capacity).....	21.0	8.8	9.3	99.4	97.3
Production of automobiles and trucks.....	120,924	†137,651	148,443	118,229	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$23,418	\$23,792	\$27,027	\$24,136	\$19,433
Electric power output (million kilowatt-hours).....	5,435	5,433	5,450	5,564	3,130
Crude Oil and Condensate (daily average, 1,000 bbls.).....	5,136	5,075	5,015	5,675	3,842
Bituminous coal (daily average, 1,000 tons).....	462	423	304	2,134	1,685

TRADE

Miscellaneous and l.c.l. Carloadings (daily average, 1,000 cars).....	68	68	75	90	86
All other carloadings (daily average, 1,000 cars).....	30	30	34	65	52
Money in circulation (millions).....	\$27,382	\$27,328	\$27,476	\$28,254	\$9,613
Department store sales (change from same week of preceding year).....	-7%	-14%	-8%	+2%	+17%
Business failures (Dun & Bradstreet, number).....	196	221	182	104	228

PRICES (Average for the week)

Cost of Living (U. S. Bureau of Labor Statistics, 1935-39 = 100), Sept.	169.6	168.8	174.5	105.2
Spot commodity index (Moody's, Dec. 31, 1931 = 100).....	343.9	339.7	337.4	401.3
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)....	227.9	224.8	224.8	277.9
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)....	292.3	†292.8	296.7	320.4
Finished steel composite (Iron Age, lb.).....	3.705e	3.705e	3.705e	3.720e
Scrap steel composite (Iron Age, ton).....	\$28.92	\$27.58	\$26.58	\$43.00
Copper (electrolytic, Connecticut Valley, lb.).....	18.281e	17.625e	17.625e	23.500e
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$2.18	\$2.18	\$2.22	\$2.24
Sugar (raw, delivered New York, lb.).....	5.99e	6.01e	6.00e	5.68e
Cotton (middling, ten designated markets, lb.).....	29.90e	29.75e	29.61e	31.23e
Wool tops (New York, lb.).....	\$1.739	\$1.707	\$1.630	\$1.667
Rubber (ribbed smoked sheets, New York, lb.).....	16.58e	16.39e	16.30e	20.72e

FINANCE

90 stocks, price index (Standard & Poor's Corp.).....	128.7	128.3	126.0	122.6
Medium grade corporate bond yield (Baa issues, Moody's).....	3.36%	3.36%	3.36%	3.53%
High grade corporate bond yield (Aaa issues, Moody's).....	2.61%	2.61%	2.61%	2.86%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	14-12%	14-12%	14-12%	14-12%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	1 1/8%	1 1/8%	1 1/8%	1 1/8%

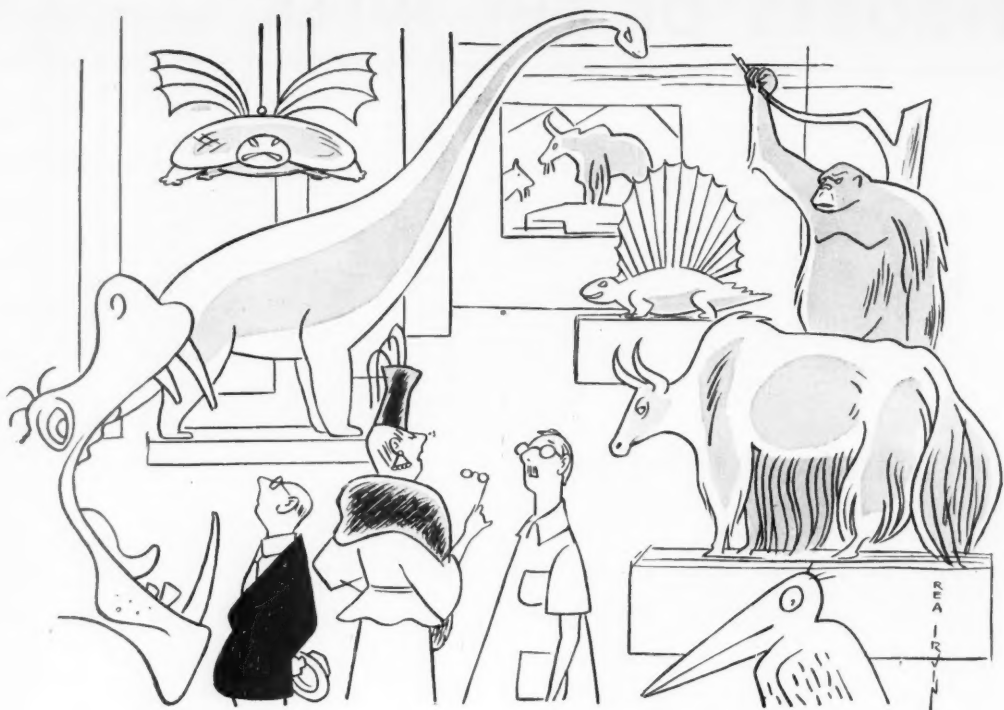
BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	46,860	47,341	46,286	46,607
Total loans and investments, reporting member banks.....	66,681	66,772	66,077	62,229
Commercial and agricultural loans, reporting member banks.....	13,699	13,680	13,434	15,415
Securities loans, reporting member banks.....	2,215	1,884	2,099	1,357
U. S. gov't and gov't guaranteed obligations held, reporting member banks....	37,401	37,838	37,252	33,268
Other securities held, reporting member banks.....	4,959	5,013	5,056	4,234
Excess reserves, all member banks.....	1,160	810	1,150	858
Total federal reserve credit outstanding.....	18,416	17,833	18,406	23,729

*Preliminary, week ended November 5.

†Revised.
††Estimate (BW—Jul. 12/47, p16)

‡Date for "Latest Week" on each series on request.



"...And these are all First Families, I presume?"

Well, maybe not *all*, Madam! But that mounted Wild Yak and that mounted Gorilla—they're both Famous Firsts in Philadelphia's Academy of Natural Sciences. It's America's first museum devoted exclusively to natural history and one of the many that keep Philadelphia a busy patron of science and the arts.

Yes, culture counts in Philadelphia—a city of special characteristics and interests of its own. If you're in business here, or plan to be, it will help you to understand how Philadelphians

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Drop us a line or have a representative call. We'll be glad to tell you more about the many ways The Pennsylvania Company is ready to give you service over and above the call of duty.

19 OFFICES

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WASHINGTON OUTLOOK



DEWEY'S TRY for a comeback as party leader got pushed off the track in last Tuesday's election. And Republicans learned the voters aren't yet tired of Truman's welfare-society ideas.

Ex-Gov. Lehman's Senate victory over John Foster Dulles in New York adds up to that.

Party-wise, Dewey threw all the resources of his state machine—including a stump tour of his own—behind Dulles. The defeat—along with G.O.P. loss of eight city halls, including Syracuse and Binghamton—spells heavy trouble for Dewey if he seeks another term as governor next year.

Issue-wise, Dulles and Dewey made "statism" their target. Lehman espoused Truman's domestic social-welfare program in toto.

Sen. Taft and Gov. Driscoll of New Jersey turn up as the Republican beneficiaries of Tuesday's limited voting demonstration.

In Ohio, voters adopted the so-called Massachusetts ballot—which makes the voter mark a choice for each office, eliminates straight party voting. That separates Taft's reelection bid for the Senate next year from Ohio's governorship race. Democrats had hoped that, on a straight party ballot, popular Gov. Lausche would draw votes away from Taft.

The Democrats still have an out. Ohio Attorney-General Hugh Jenkins, a Democrat, may rule that it takes a majority of all those voting in the election to pass a constitutional amendment, not just a majority of those voting on the amendment. Since 400,000 voters ignored the amendment, such a ruling would defeat it—and of course precipitate a court battle.

Failing that, the Democrats' only real hope of defeating Taft is to persuade Lausche to run against him for the Senate.

In New Jersey, Driscoll's reelection boosts his name in the list of possibilities for the G.O.P. presidential nomination in 1952.

This was largely a politician's election. The results should be measured in terms of the rise or fall of personal fortunes.

But there is this exception: Defeat of Dulles gives new strength to the Wherrys and the Kempers who are trying to lead the G.O.P. away from the internationalism of Vandenberg's bipartisan foreign policy.

You will see this affecting next year's decisions in Congress on ECA, arms aid, and the like.

A TIGHTER CLAMP on strategic goods and strategic ideas is the first result of a new respect government is feeling for Russian technological abilities.

You have seen hints of this new respect ever since Truman's Sept. 23 announcement that Stalin's men had produced an atom bomb—three years sooner than expected.

This week government took two actions to make it rougher for Russia to get assistance—indirectly or accidentally—from this country:

- Export-control lists were reshuffled to require licenses on critical industrial products shipped anywhere in the world, instead of just to Europe. Purpose: to prevent reshipment behind the iron curtain. From now on, your chance to get a license will hinge upon whether your shipment is in line with last year's volume.

- The nation's technical and engineering societies were enlisted in a voluntary program to keep technical material away from foreigners who might let the Russians have a peek.

DIVVYING ECA AID will be strictly a Washington operation after next June.

Marshall Plan nations already have accepted Hoffman's plan for taking the job out of the hands of their 16-nation committee in Paris.

Under the new system, each country will submit its own schedule of dollar needs. Then Washington will adjust to fit the total.

Reasons for the shift: (1) to free the OEEC staff in Paris to work out Hoffman's one-European-market idea; and (2) to end the hallway bargaining that now goes on between the various nations—France agreeing to a chemical plant for Belgium if Belgium will vote for a French steel mill, and so on.

INCREASED FEDERAL AID for highways will be a big issue in Congress next year. Highway subsidies cost around a half-billion a year now.

Pressure is coming from two sources to hike the federal contribution:

Public Roads Administrator Thomas H. MacDonald wants to get started on building up the 40,000-mile interstate-highway network enough to handle present traffic; that's an \$11-billion job at 1948 prices.

State highway commissioners are bidding for a 75-25 split in federal-state financing of work on this system; it's 50-50 now.

A preview of how the interested lobbies are

WASHINGTON OUTLOOK (Continued)

lining up for this fight came this week at a road-builders' meeting in Washington.

National Highway Users Conference—no increase in the 50-50 ratio.

U. S. Chamber of Commerce—also no increase.

American Automobile Assn.—two-thirds federal, one-third state for the interstate network; 50-50 on all other federal-aid highways.

Automotive Safety Foundation (manufacturers in oil, rubber, vehicles)—no vote on ratio, but at least \$500-million-a-year in federal aid.

MAKING FRIENDS with businessmen is Federal Trade Commissioner John Carson's current project. He's letting it be known he wants speaking dates with trade groups who opposed his confirmation because of his co-op background. Carson thinks a personal appearance will convince businessmen he isn't hard to get along with.

FIRST PUBLIC HOUSING projects under the new Wagner-Ellender-Taft law are on Truman's desk for O.K.

The Public Housing Administration has sent over requests for \$20-million to pay architects and engineers for drawing up 106 public-authority projects. This is the first batch of plans to get local and state legislative blessing.

At this pace, PHA estimates that 20,000 dwelling units will be under way by next March; 112,500 by year's end. The six-year program calls for 810,000 units of rent-subsidized housing.

BIGGER SOCIAL SECURITY seems certain for next year—particularly now that steel is following the Ford pattern of a government-industry pension package.

A fatter old age pension under the government insurance plan is a cornerstone of Truman's welfare program.

Last month the House passed legislation expanding coverage and increasing benefits (BW-Oct. 15'49, p115).

Labor already has promised to push for Senate action on the measure early in the next session.

Now, increasing numbers of employers have a stake in helping the bill get through. The cost of Ford and steel pensions goes down as the amount workers get from Social Security goes up.

Another factor that leads management to favor larger government pensions: Employees con-

tribute to government insurance equally with employers.

WANT TO KNOW what kind of pension clauses others have written into their union contracts? The Bureau of Labor Statistics has a booklet of quotes from existing contracts. Copies are free upon request to BLS.

A DOUBLE BUDGET for the federal government—one budget for operating expenses and one for capital outlay—is being talked up again around town.

Reason: It's a way to camouflage the size of the deficit between tax revenues and spending.

Last week's midyear budget review, showing a prospective deficit of \$5.5-billion in 1949-50, started the talk. Nearly \$2-billion of that deficit is accounted for by higher-than-expected Commodity Credit Corp. crop loans and Reconstruction Finance Corp. purchases of home mortgages.

Between \$3-billion and \$6-billion of today's budget goes for projects or loans which will be repaid over the years—theoretically at least.

Samples: Export-Import Bank loans and Reclamation Bureau projects, as well as RFC's mortgage purchases and CCC's crop loans. Even much of TVA's plant is charged up as current spending.

Proponents of double-budget accounting long have urged that these repayables be taken out of the picture of government's running expenses.

They argue that you would get a truer figure for the cost of government if that were done and that capital projects could be weighed on their economic value, rather than in terms of impact on annual government spending.

Another attack on the deficit you are likely to see revived is the scheme to require corporations to pay up all of this year's income tax by next June 30. That would mean paying, in two quarters, what now would be spread over four.

The change could bring in as much as \$5-billion more revenue in the 1950 fiscal year. That's just about enough to wipe out the prospective deficit.

The one-shot gain from speeding up corporate income-tax payment wouldn't hurt federal income in 1950-51. By requiring corporations to pay up all 1950 taxes by June, 1951, the government would still collect a normal year's revenue.

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Nickel Alloy Steel Gears

There are two kinds of nickel alloy steel gears... those that are carburized, and those that are direct hardened.

CARBURIZED GEARS

The carburized gear is used in applications that require maximum wear resistance in the surface, as well as greatest surface compressive strength. With nickel alloy carburizing steels, this goal is consistently attained, together with development of extremely tough cores that resist shock loads, fatigue and bending stresses. Moreover, a chief cause of noisy gears... the distortion that accompanies heat treating... is inherently resisted by nickel alloy carburizing steels.

DIRECT HARDENED GEARS

The direct hardened steel gear is used to carry heavy tooth loading in applications where resistance to wear and surface compressive stresses is not quite so vital a factor. Here again, the nickel-containing steels develop the required strength more consistently and in heavier sections than carbon steels, and are generally more resistant to shock, fatigue and multi-axial stresses. Distortion resulting from heat treatment may be minimized by using nickel alloy steels and their machinability before final heat treatment is very good.

Giving greater play to the skill of the engineer, nickel alloyed steels not only provide increased strength without sacrificing ductility, but they

harden at lower temperatures which simplifies heat treatment and minimizes deformation and scaling.

MEET VARIED REQUIREMENTS

Nickel alloyed steels enable producers to meet virtually any reasonable requirements... whether dictated by revised stress analysis due to design changes, or by changed fabricating methods that demand better machining qualities or improved response to heat treatment.

MANY TYPES AVAILABLE

The many standard grades of nickel alloyed steels permit specifying the particular type which provides the best set of properties for any reasonable fabrication and service demands.

Unending competition for higher speeds and heavier loads, for quieter operating and longer machine life, provide opportunities for gear producers to drive ahead with nickel alloyed steels. Use the coupon for your copy of "Modern Trends in Nickel Steel and Cast Iron Gear Materials." This useful and informative booklet is yours for the asking. Send for it now.

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OREGON'S PACIFIC COASTLINE — closely skirted by a spectacular 400-mile scenic drive — is a primary vacation destination for an important segment of the state's tourists. Shoreline sports fishing is a year 'round attraction at many spots.

CRATER LAKE — one of the seven natural wonders of the world — is a major focal point of tourist interest. Approximately 80% of tourist income in Oregon is derived from motoring visitors, the balance from airline, railroad and bus travelers.

The Oregonian
PORTLAND, OREGON
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Delivered Pricing Is Legal—by Fiat

FTC lawyers have worked out a deal to let steel, and other industries, go back to freight absorption to meet competition.

The Federal Trade Commission and the steel industry are getting together to pass a law that Congress failed to pass. That, in effect, is the significance of an agreement reached last week between FTC attorneys and lawyers representing steel companies in FTC's pending basing-point complaint.

The O'Mahoney delivered-pricing bill got lost in the shuffle in Congress' final rush to adjourn (BW—Oct.15'49, p15). But last week FTC announced that it had reached a tentative agreement with the steel industry—and the agreement may settle, for the time being at least, the whole argument over the legality of delivered pricing.

• **Pricing Switch**—Up to the middle of last year, the steel industry sold its products on a basing-point basis. But after the Supreme Court handed down its famous cement decision (BW—Jun. 12'48, p74), U.S. Steel Corp. switched to f.o.b.-mill pricing, and the rest of the industry followed along.

Nobody was happy about the shift, though. The steel companies said the new system prevented them from competing with each other for business, because the mill nearest a customer usually had a price advantage. And FTC went right ahead with its complaint against the American Iron & Steel Institute and 101 steel companies.

The steel producers hoped Congress would legalize freight absorption before this case came to a decision. But when Congress adjourned without acting on the O'Mahoney bill—and when it became apparent that any bill that passed would still ban steel's old basing-point system—the industry decided to settle the FTC case without carrying on a hopeless battle.

• **Tentative Terms**—Under the terms of the tentative agreement, the steel industry would be permitted to absorb freight to meet competition—except where the effect would be to lessen competition unlawfully. That's the same thing the O'Mahoney bill would permit. And the steel producers agree:

(1) To let buyers buy at f.o.b.-mill prices if they want to, instead of at delivered prices.

(2) Not to use identical freight books in figuring their delivered prices.

(3) Not to get together in advance on their base prices or charges for extras.

If the agreement goes through, other heavy industries—cement, lumber, heavy chemicals—would, of course, be guided by it.

• **O.K. Needed**—FTC's attorneys have approved the agreement. It still must be O.K.'d by the five commissioners themselves. Lynn Paulson, FTC lawyer in charge of the steel case, says he's going to recommend to the commissioners that they settle the case on these terms. Steel-industry attorneys have told him they're ready to sign on the dotted line.

One unknown factor in the situation

LABOR STRIFE AHEAD

Last week, at the C.I.O. convention in Cleveland, the alliance between native trade unionism and Communist-dominated labor organizations was broken. That means that next year—1950—will see turmoil on the labor front—a milder version of the civil strife and bloodshed that have followed similar splitups in other countries. There will be serious trouble in American industry.

That is how the editor of BUSINESS WEEK's labor department interprets the outcome of last week's dramatic convention.

Many employers will find their own plants becoming the battleground on which left-wing and right-wing forces struggle for control of workers. The labor war will be dirty, violent, and bitter. It will last about three years. And any employer caught in it will be lucky to escape undamaged.

On page 98 BUSINESS WEEK reports on the significance to industry of the new labor conflict, where its effects will be felt, what the strategy will be.

is the thinking of FTC's two New Dealish new members: John Carson, the former co-op official, and ex-Sen. James M. Mead. But the guess in Washington is that the proposed pact gives the commissioners very little to quibble about.

• **Solution**—Paulson believes the order would wipe out the "evils" the government saw in the old basing-point system, because it would:

• Give any buyer the chance to buy f.o.b. mill if he wants to—which he didn't have under the old system; and
• Prevent the steel producers from using the same book to figure freight rates—a "key device," according to FTC, which enabled the producers to match their prices exactly on steel laid down at a customer's plant anywhere in the country.

At the same time, according to Paulson, the pact would meet the industry's chief demand by giving producers individual clearance to sell at a delivered price and absorb freight.

• **Effect on Congress**—If the agreement goes through before Congress takes up the O'Mahoney bill again next year, it may affect the course of the legislation. But it isn't yet clear which of these arguments may turn out to be most significant.

The antimonopoly bloc feels that "FTC has now shown that it can work out satisfactory settlements with industry. This proves that, on such complex matters, we should leave regulation up to FTC."

Many businessmen feel that, despite the FTC-steel deal, legislation is still needed. Businessmen want definite guidance as to what they can and cannot do; administrative rulings can be changed.

• **Not Covered**—There's no doubt that the steel agreement would have just about the same effect on delivered pricing and freight absorption as the O'Mahoney bill. But the bill also contains some important amendments to the Robinson-Patman act's provisions on price discrimination (BW—Oct.22'49, p20). The proposed steel pact, of course, has no bearing on this angle.

So the O'Mahoney bill may well be pushed through to take care of such points. If it does, its provisions will, of course, take precedence over the steel pact, which is only an administrative order.

Eaton Pulls Out of Portsmouth—On Top

He sells plant and equipment of Portsmouth Steel to Detroit Steel at a gain of more than \$10-million over original investment.

Cyrus Eaton, never a slow man to turn a dollar, closed a deal last week that will turn upwards of \$10-million.

• **Off the Block**—Eaton sold the plant and equipment of Portsmouth Steel Corp. to Detroit Steel Corp. Portsmouth was organized in 1946 when Eaton's Otis & Co., with help from Henry Kaiser, bought the Portsmouth (Ohio) steel works of Wheeling Steel Corp. for \$12-million—\$3,775,000 for the physical plant, the rest for inventories and working capital. The company became the main supplier of steel for Kaiser-Frazer auto production.

For the physical properties at Portsmouth (the company will continue as an investment operation), Detroit Steel will pay about \$6.2-million in cash. In addition, Portsmouth stockholders will get 290,000 shares in Detroit, equal to about a one-quarter interest. Although the deal still has to come up before Portsmouth stockholders, approval is practically a foregone conclusion. Otis & Co. holds control of Portsmouth in its vest pocket.

• **\$10-Million Gain**—The cash involved alone will balance out the \$3,775,000 investment and the subsequent improvements in the Portsmouth plant. A one-quarter interest in Detroit Steel is worth about \$5.8-million. Besides that, Portsmouth will retain a 10% interest, bought in 1948, in Cleveland Cliffs Iron Corp. The holding is worth about \$3-million.

As it stands now, Portsmouth has \$12.7-million of working capital. Miscellaneous assets are good for another \$800,000. Adding it all up, you get a total value for the investment company Portsmouth now becomes of \$22.3-million. Thus, the original capital of \$12-million has nearly been doubled in three years. And that doesn't count the \$3.8-million paid out in dividends since Eaton took control.

• **Time to Quit**—Eaton started to think about unloading Portsmouth early last summer. He realized then that the cream was gone from the steel market. The contracts Portsmouth had for sale of semifinished steel to Wheeling Steel and K-F had run out. To make the plant competitive, hot- and cold-rolling facilities would have to be added. A pipe mill, too, would be needed. The new equipment would cost anywhere from \$10-million to \$20-million.

So Eaton gave Avery C. Adams, executive vice-president of Portsmouth, the job of finding the best possible deal he could make for a sale. Avery had about half-a-dozen companies to dicker

with. Detroit Steel's offer was the best he found.

• **Detroit's Gain**—And the deal is a good one for Detroit Steel. Once the steel-finishing facilities and the pipe mill are put in, it will have a completely integrated operation. Up to now, it has been strictly a cold-rolled strip maker and a fabricator.

If both Portsmouth and Detroit profit

from the sale, who comes out on the short end? For the answer to that you have to go back to 1937, when Wheeling Steel decided to concentrate further its operations in and around Steubenville and Wheeling. At that time, the hand-operated finishing sheet mills at Portsmouth had become obsolete. Instead of replacing them, Wheeling dismantled the equipment.

• **Wheeling Unloads**—During the war, the wire-making facilities, the open hearths, and the blast furnaces that were left at Portsmouth were operated at full capacity. When peace came, major replacements were needed. But Wheeling had more or less soured on

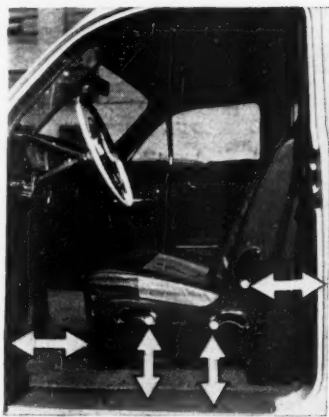


Tip for Tired Taxi Drivers: Movable Seat

Aches and pains from sitting in one position for hours don't sweeten taxi drivers' dispositions. Checker Cab Mfg. Corp., Kalamazoo, Mich., had this fact in mind when it designed this new seat for its 1950 model. It can be moved up, down, forward, backward, and tiltwise. It has more than 200 possible adjustments—all designed to give the cabbie an easier ride. And a "relaxed driver," the company notes, "is a safer and better disposed driver."

Checker, which has been making taxicabs exclusively for 28 years, also owns a controlling interest in Parmelee Transportation Co., one of the nation's largest taxicab operators. Union organizing drives this year give special emphasis to the problem of getting the most comfort for drivers.

Other features of Checker's 1950 models: more window space; a back seat designed to stay put.



the plant, since it was now out of the sphere of its main operations. So it set out to unload it; it meant a large book loss, but that could be at least partly recovered in the company's excess-profits tax. Enter Cyrus Eaton.

Eaton had cut his teeth in steel when he started the action that eventually resulted in the formation of Republic Steel Corp. But in 1945, he had a new strong man to work with—Henry Kaiser. Eaton's Otis & Co. was handling the finances of Kaiser's entry in the auto field. And Kaiser had to get steel for his cars.

Wheeling Steel officials, like many other oldtime steel-management men, didn't even dream of the boom period that lay ahead for the industry. So when Eaton offered Wheeling \$3,775,000 for the Portsmouth plant, \$4-million for inventory, and \$25,000 for the small Emperor Coal Co., it snapped at the bid. Eaton then added \$4.2-million for working capital, making the total investment \$12-million.

Of the first common stock offering in the new company, Kaiser-Frazer bought 200,000 shares at \$10 each. Graham-Paige Motors Corp. took another 100,000 shares; Otis & Co. bought 2,500. The public got 1,025,000 shares. So of the 2.5-million shares authorized, 1,327,500 shares were outstanding.

• **Kaiser Out**—In June, 1948, after Kaiser and Eaton had fallen out (BW—Feb. 21 '48, p85), K-F. sold its 200,000 shares to a group of investors. Graham-Paige got rid of its holdings in July, 1947.

FIRST WORDS ON K-F. CAR

Kaiser-Frazer Corp. this week gave out the first fragmentary details on its new, smaller car (BW—Oct. 15 '49, p26). In announcing a \$200,000 contest to name the auto, K-F. said the model would be a standard-size, five-passenger "low-priced car in the low-price field."

Insiders knew a few—but not many—more things about the new automobile. First releases of tooling are now being made, but not enough of them are out yet to chart the full design. It's certain, though, that the design will be highly modern. The front of the car at this stage somewhat resembles the 1950 Studebaker. High fenders in the rear carry out a horizontal line running from front to rear.

K-F. says the car will have an engine that "will deliver remarkable gasoline mileage." Best guess now is that it will be built by Continental Motors Corp., and that it will be a standard engine in the higher-compression ranges.

Price is still vague, but, presumably, the car will deliver at factory for around \$1,500 or a little less. Dealers have already been told it isn't a \$1,000 car.

U. S. Hops Into the Jet Race

Plane manufacturers decide they can compete with British on jet transport design—even without a government subsidy. They are making money now on commercial and military business.

Spurred by British competition (BW—Oct. 29 '49, p80), American aircraft manufacturers are finally tackling in earnest the problem of building jet transports.

• **Double Attack**—The U. S. is attacking the jet-transport problem from two angles:

(1) First step is to rush turboprop (turbine-driven propeller) engines into existing transport airframes. This would produce a vibrationless, medium-haul transport with a speed of 350 m.p.h. to 400 m.p.h., to compete with the British Viscount Apollo, and Hermes V. So far, there's only one U.S. turboprop engine that will be commercially available in the immediate future—the 2,750-hp. Allison T-38. Both Consolidated Vultee and Martin are working to adapt the T-38 to the Convair-Liner and Model 202 airframes. Lockheed is considering putting four T-38's into its Constitution airframe.

(2) Meanwhile, the industry will design swept-wing, 500-m.p.h.-plus transports with jet engines and no propellers to beat the jet-driven de Havilland Comet in speed, payload, and range. The true jet is faster than the turboprop, but uses more fuel. Designers at Lockheed, Douglas, and Boeing now feel they have a definite target to shoot at in Comet performance; they are sweeping away the pile of design sketches on their drawing boards and settling down to detailed design of a specific type aimed at licking the Comet.

Boeing has abandoned earlier plans to convert its XB-47 Stratojet bomber design to a transport. Instead, it is designing a new jet transport from the ground up. Lockheed favors a four-jet, swept-wing, 50-passenger design; Douglas is banking on a swept-wing version of the DC-6, powered by four jets.

• **Government Help?**—The aircraft industry will not commit itself officially on how much help it wants from the government in building jet transports until Congress reconvenes in January. But there are strong indications that it will stress aid in cutting regulatory red tape—not a subsidy handout. In the past most manufacturers felt that only by federal subsidy could development of commercial transports continue (BW—Oct. 8 '49, p38).

Now that attitude has changed. Most of the transport manufacturers feel that they can push ahead largely under their own financial steam. Several factors

have helped to bring about this change:

• **Commercial Transports.** Two years ago, when the cry for subsidy was loudest, the industry was deeply in the red from a series of heavy deficits on commercial-transport projects.

But during the past year, many of these projects that looked so sour in 1947 (Lockheed's Constellation, Douglas' DC-6, and the Convair-Liner) have turned into profitable ventures as a result of reorders.

Although airline finances hit a new low in 1947, they have come up fast; a \$15-million profit is in sight for the airlines this year. This has spurred buying of new equipment—which, in turn, has put the Constellation and DC-6 projects into the black, and has brought Convair-Liner close to the break-even point.

With continued improvement in airline finances, the outlook for replacing current equipment with jet transport in another five years looks promising.

• **Military Orders.** A major factor in putting the aircraft manufacturers in the black, of course, has been the military program. Two years of heavy orders to build up postwar naval aviation and the Air Force have padded the bones of the transport manufacturers with financial fat. Lockheed, Douglas, Boeing, and Convair are all headed for a profitable year.

In any case, the manufacturers have had some second thoughts about subsidies. The proposed prototype legislation puts final authority on prototype development into the hands of a politically-appointed board. Manufacturers feel that control by a prototype board would be a tougher problem to solve than financing—now that they and their customers have improved credit ratings.

• **Limited Help**—Manufacturers will aim at getting release of better jet engines from the military list for commercial use. Present jet engines available for commercial use are already obsolete. And even they are tied by a maze of legal red tape. Manufacturers want a better working arrangement with the military on using the next-to-the-best military engines for future civil transports.

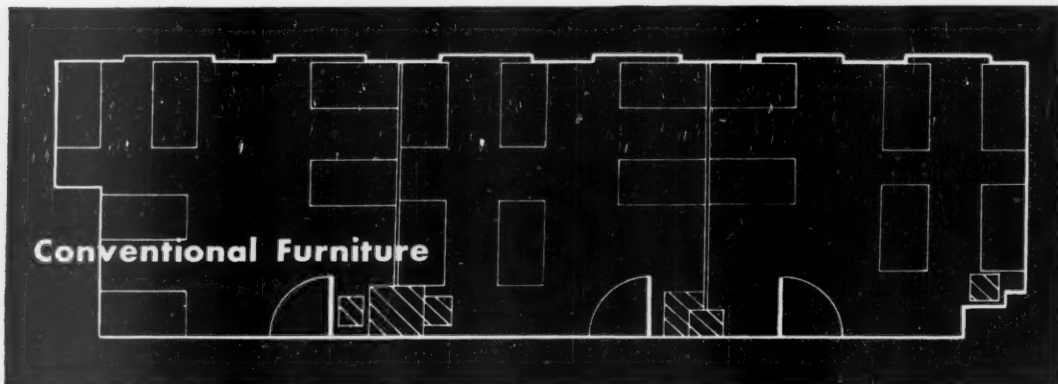
Another point where the government can help is in lowering the certification regulations and procedures for jet transports. Presumably they would have to operate under present piston-engine rules. These disregard special jet characteristics, hence penalize the jet.



OLD Crowded working conditions make it hard for this executive to get dictation done while others are working or telephoning.



OLD Layout of a du Pont office wasted time; four men, plus stenographers were cramped by desks, tables.



855 SQ. FT. is the space taken by these three rooms in the Nemours Building at Wilmington, Del. Each room has space for three workers each with his desk and table. Files are kept on tables. Partitions between rooms enforce wasteful desk arrangement.

How to Put Private Stalls in a Bull Pen

The modular office furniture shown in these pictures stole the show at an office-management conference held by the American Management Assn. in New York.

Francis F. Middleswart, an E. I. du Pont de Nemours & Co. consultant, told the office managers du Pont had made lengthy time-and-motion studies of how people work at desks. The result: movable L-shaped desks with attached partitions. The payoff: a solution for du Pont's problems of office layout in open-area offices.

Ordinarily, Middleswart said, partitions cut down flexibility and use up space. So du Pont decided to build the partitions right into the desks.

Moreover, company engineers found that the conventional desk and table

arrangement with one filing cabinet, one bookcase, and one chair for visitors requires about 80 sq. ft. of floor space, without counting aisles or partitions.

Using the L-shaped desk as a base, they were able to provide the same facilities in 65 sq. ft. by adding a desk-high filing cabinet, and putting a bookshelf above one side of the desk at the back. They developed additional types of filing cabinets to fit different filing needs.

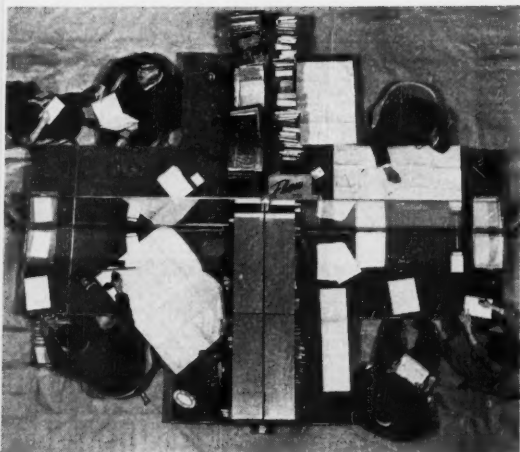
This modular furniture allows office planners an infinite variety of combinations. They can be used to save space, as in the diagram on page 23. Or they can emphasize privacy, as in the picture at right.

Du Pont provides an over-all pattern of fluorescent lighting, independent of the desk arrangement. So lighting doesn't

have to be changed when desks are moved to some new layout.

The modular furniture allows du Pont to hang on to the space economies of the open-area office, while at the same time providing privacy and prestige for executives who would otherwise have to be assigned to private offices. The company doesn't feel that its new furniture solves all its office-layout problems, but feels the modular units work out fine for most departments.

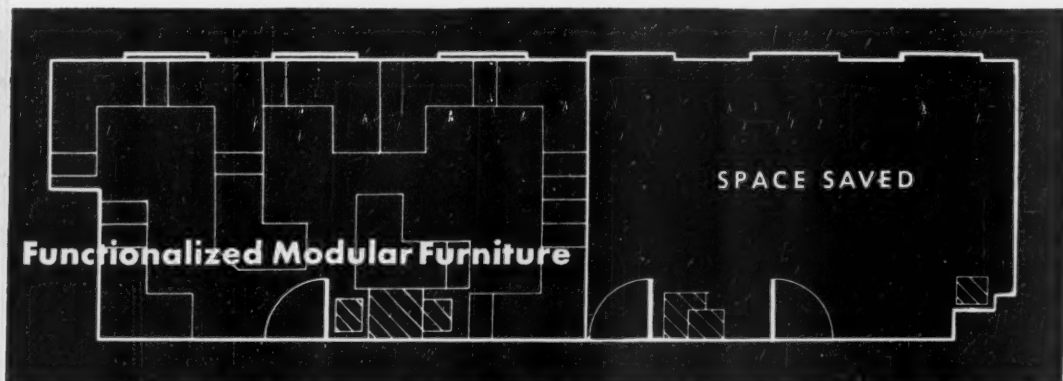
Du Pont doesn't plan to go into the furniture business. It worked the desks out to fit its own needs. But the company hopes to interest furniture manufacturers in putting out the furniture on some mutually agreeable basis. Several manufacturers have already gotten in touch with du Pont.



NEW Du Pont's modular furniture separates workers, provides space for files, books. Blocks at center are bookcases.



NEW Models are moved around for most privacy (left) or economy (below). Movable L-shaped desk is basic unit.



412 SQ. FT. holds the same nine workers, with their desks and file cabinets (small oblongs). Desks are movable, can easily be rearranged to fit new conditions. The cross-hatched squares are building columns. This layout is for space saving, not privacy.



UNIT closeup shows how partition fits into desk. Du Pont engineers designed these desks for company use, not for outside sale.



GROUP of modular units can be arranged along corridor, presents an attractive appearance, boosts office morale.

Cellophane Deal

Olin Industries will make cellophane under du Pont license, with du Pont help. Contract ends year-long search.

E. I. du Pont de Nemours & Co. came to the end of a long search this week. It had found a taker on its offer to help build up a competitor in production of cellophane. Olin Industries, Inc., East Alton, Ill., is going into the cellophane field, under a du Pont contract.

The contract states du Pont will:

License Olin under all its cellophane patents;

Furnish full technical information;

Help find a plant site;

Design and build an eight-machine plant—capacity about 33-million lb. of cellophane a year;

Help put the plant into operation—including training personnel.

Olin is paying a fixed fee for design and construction of the plant; it's also paying for licenses and technical help. When and where it will go into production will be announced later.

Du Pont has been trying for over a year to get some competitor, or prospective competitor, to go into the cellophane business.

One reason: During, and since the war, there has been a cellophane shortage. Normally, says Arlington Kunsman, manager of the cellophane division of du Pont's rayon department, du Pont would have built new capacity.

Another reason: There was a catch to new capacity. In December, 1947, Department of Justice had filed an antitrust suit against du Pont, charging the company with unlawfully monopolizing the cellophane industry. Du Pont denied the charges; the case is scheduled for trial next year. But the antitrust action made it awkward for du Pont to expand its cellophane activities further. It began to look around for other possibilities.

• **\$20-Million**—Early this year, du Pont offered its competitors free license to use its cellophane patents. But here again there was a hitch. Du Pont stipulated that any taker should have at least \$20-million to put into the new venture. As Kunsman pointed out, not many companies have that much lying around idle.

• **Nibbles**—Freeport Sulphur Co. nibbled, then lost interest.

For a while it looked as though W. R. Grace & Co. would really bite. But at the eleventh hour, the deal fell through. Grace wanted du Pont to set an upper limit on how much capital it would have to shell out. And Grace



Macaroni al Trumanese

When President Truman passed through St. Paul last week, the National Macaroni Institute was faced with an acute problem. The President was in the heart of the wheat belt, and the institute wanted to emphasize the importance of wheat to macaroni. Then inspiration came: What would be better than a portrait of the President executed in this doughy medium? It was served to the President (without sauce) by an attractive Minnesota macaroni maker, Mrs. Rose Marie Rudnick.

wanted du Pont to provide technical knowledge for at least five years.

Olin Industries finally proved the answer.

Olin Industries is known chiefly as a maker of small arms and smokeless powder. The corporation was formed in December, 1944, when Olin Corp. merged with Western Cartridge Co. The present corporation takes in a dozen manufacturing divisions and affiliates, including Winchester Repeating Arms Co., New Haven, Conn., and Western Cartridge Co., East Alton.

• **Logical Step**—John M. Olin, president of Olin Industries, sees his company's new venture as a logical expansion into a field in which it has already had wide experience.

"We have conducted intensive research for many years in cellulose and related materials and products in connection with our explosives and chemical business," Olin says.

• **Third Producer**—The Olin-du Pont deal brings a third cellophane manufacturer into the U.S. industrial picture. Right now, American Viscose Corp. is the only U.S. company besides du Pont that makes it. Output of cellophane is about 220-million lb. a year; du Pont makes 75%, and American Viscose the rest. Viscose hopes to bring up its output to 45% of the total after its expansion at Fredericksburg, Va.

Back to the Mines

Lewis dodged injunction and investigation by ordering coal miners back to work. Stocks will be rebuilt.

John L. Lewis' soft-coal miners trooped back into the pits this week—but that's no assurance that the nation's 1949 coal-strike crisis is over.

The end of the latest coal stoppage came suddenly and dramatically, after a 51-day shutdown of bituminous mines east of the Mississippi. Lewis summoned reporters to a Chicago hotel conference room, announced in a three-page statement that soft-coal production was being resumed.

It is, he said, "an act of good faith designed to contribute to public convenience." He also called it "another contribution of major magnitude [by U.M.W.] to enhance the remote possibility of agreement being reached" between the union and soft-coal employers.

• **Deadline**—The Lewis announcement sent 380,000 coal diggers back into the mines "under the terms, wages, and conditions of employment" of the contract which expired last July 1. But the back-to-work order has a catch: It runs out at midnight on Nov. 30.

Most mines began running full blast within a few hours after the Lewis announcement. Operators set out to get as much coal as possible above ground in the next three weeks. Most of them interpreted literally the Lewis warning that there's only a "remote possibility" of a coal settlement by Dec. 1.

• **Injunction Threat**—New efforts to effect a soft-coal agreement through direct collective bargaining had fallen flat earlier in the week. Cyrus Ching, head of the Federal Mediation & Conciliation Service, called union and employer negotiators to Washington, advised them of growing government concern. The coal-contract dispute was headed for White House action.

This fact, more than the growing pinch of short coal supplies on the "public convenience," may be behind the Lewis back-to-work order.

As long as the Taft-Hartley act was a hot issue in fall elections, the President balked at using its provisions—even "reluctantly"—to end an unpopular national coal strike. But he could stop thinking about the political implications of White House use of T-H once votes had been counted. So T-H fact-finding and a strike injunction were a distinct possibility on the eve of Lewis' back-to-work order to miners.

Resumption of coal output blocks

any immediate invocation of T-H by the White House. Truman, himself, has made it clear that there can be no "national emergency" as long as coal is being produced. Thus, Lewis may again have outmaneuvered the White House in its plans for dealing with the miners.

• **Motives**—But why did Lewis react so quickly to the mere shadow of T-H? Mine operators have three theories:

(1) Lewis recognized the public-relations value of a voluntary end of the walkout, as against eventual acceptance of a court's back-to-work order.

(2) Lewis doesn't want a fact-finding board prying into the workings and financial status of U.M.W.'s pension and welfare fund. He couldn't dodge such an inquiry if fact finders were named; the current dispute involves a union demand for a higher welfare-fund royalty and an employer demand for better administration of the fund.

(3) Lewis sent his men back to work to "keep his union from disintegrating." This theory is the most comforting to the operators; it's based on reports that local U.M.W. groups in the coal fields were growing restive, were talking about going back to work without waiting for Lewis to give the word.

Undoubtedly, Lewis' recognition of the plight of his miners was a factor. Soft-coal miners worked only a three-day week from July 5 to the Sept. 19 strike date. They had run low on strike reserves—cash and credit.

• **Money Reserves**—Lewis heard reports to this effect from his 200-man U.M.W. policy committee in Chicago. Immediately afterward, he sent his miners back to work for three weeks, at least. Significantly, he didn't reapply prestrike curbs on work time—a union spokesman said that it's "safe to assume miners will work five or six days a week" until the new strike deadline.

This strengthens Lewis' bargaining hand. Three weeks' full pay, plus overtime if there's a six-day week, will let miners pile up new reserves to buttress a further stoppage—if Lewis' strategy three weeks hence demands one.

• **Coal Reserves**—The Lewis move also puts the country in better shape to ride out another coal strike. Three weeks production at a full 13-million tons a week—added to present stocks—would carry most coal users well into January if the miners should strike again Dec. 1.

Except that some rail schedules were trimmed, the coal strike had caused little actual hardship up to the time the miners went back. Only a week earlier, the national coal pile still amounted to 51 days' needs—about 62-million tons—and was dropping some 6.5-million tons a month. Retail dealers were down to a seven-day supply, but railroads had 43 days', steel mills 59 days', electric utilities 114 days' supply.

Changing Petroleum Patterns

Industry takes a look at itself and finds that peak load has shifted from summer to winter; meantime natural gas is becoming a big and serious competitor—especially in the East.

America's oil industry is in a state of profound change. And the impetus comes from the fast-shifting needs of the economy for liquid and gaseous fuels.

• **Dominant Note**—This basic economic fact dominated sessions of the American Petroleum Institute's 29th annual meeting in Chicago this week. Its effects on the industry were explored in speech after speech. Thus, the 5,000 oil executives heard that:

(1) Peak-load period of the industry has shifted from summer to winter. Winter demand now runs some 500,000 bbl. daily greater than summer demand.

(2) Oil and gas combined are supplying as much of the nation's energy requirements as coal.

(3) Natural gas is more and more of a serious competitor for fuel oils. And this competition will grow.

(4) Less than one-third of the energy consumed in this country is used effectively. Particularly in the field of transportation, efficiency can well be improved; this would make our liquid fuel reserves last longer.

• **Seasonal Shift**—Effects of the changing seasonal pattern in oil demand on current (1949-50) winter needs were stressed by Courtney G. Brown, head of the Petroleum Economics Division of Standard Oil Co. (N.J.).

In the area east of the Rocky Mountains (the section where seasonal influences are most pronounced), crude runs of 4,800,000 bbl. daily and crude production of 4,450,000 bbl. daily seem necessary if demand is to be met during the coming winter, he said. This is well above current levels. Crude runs now average 125,000 bbl. below Brown's figure; crude production is fully 300,000 bbl. short.

Looking at the long term, Brown cited the necessity for more storage

space. This could be used in the summertime to build up stocks of heating and fuel oils to meet winter demand. And it would reduce seasonal fluctuations in refining operations.

• **Use of Energy**—Energy requirements of the U.S. have increased 60% in the past decade, delegates were told by E. Holley Poe, New York consulting engineer. This has been met by an 11% rise in anthracite coal use, a 50% rise in bituminous coal, 66% in petroleum, 97% in natural gas, and 77% in water power. Last year, 46.6% of the nation's energy supply came from coal, 35.1% from petroleum, 14.3% from natural gas, 4% from water power.

Natural gas transmission, Poe said, is one of the nation's fastest-growing industries. Gas pipelines authorized in the past year can transport annually energy equal to 163-million bbl. of oil—equivalent to half of all the distillate fuel sold in 1948.

• **Competition**—With gas lines entering the great eastern region, Poe warned oil men to prepare for a "pronounced decline" in that rich market for kerosene and range oil. Home and commercial heating markets also will be affected as gas becomes available in the East at competitive prices. But the impact will be less severe; it is economically impractical to build enough gas lines to handle the peak winter load for this type of service.

Last market to feel the impact of gas competition will be that for residual oil. Natural gas is too superior a fuel to be used extensively in the eastern areas in competition with cheap residual oil and coal.

• **Stretcher**—The way is open to big improvements in the efficiency of equipment utilizing petroleum products, four technicians of Socony-Vacuum Laboratories told A.P.I. delegates. In fact, it is reasonable to expect that such improvements could boost our liquid fuel supply close to 30% over the next decade or two.

In the transportation field (automotive, marine, railroad), present oil-using equipment is only about 7% efficient. Diesel-electric engines have the best record, using about 26% of the energy in fuel, on the average. Autos and oil-burning locomotives are at the low end, using only about 6%.

Improved engine and transmission design can step up automotive efficiency perhaps 35%, the Socony men think.

IS YOUR COPY LATE?

To conserve coal during the strike, the federal government has ordered the railroads to eliminate certain coal-burning trains. Among the trains eliminated are several which ordinarily pick up BUSINESS WEEK as it comes off the presses at Albany. We regret the delay this causes.

The New Attack on Bigness Takes Shape

It has developed into a major campaign by the Federal Trade Commission, Justice Dept., and the Celler committee.

Prosecution, regulation, investigation—on all three fronts the government is now attacking bigness in industry. New thinking and new thinkers are playing an ever-increasing part in shaping Truman's program.

Next year, except for social welfare, no other item will have a higher priority on the Administration agenda.

In fact, Fair Dealers are already moving along these lines:

- Trust-buster Herbert A. Bergson, assistant attorney general, is piling up more and more cases aimed at splitting industrial giants.
- The Federal Trade Commission is now using its long-held power to prescribe competitive prices. Its first effort to fix the maximum discounts a businessman can give his customer was its proposed discounts for tire and tube makers (BW—Oct. 8'49, p21).
- The Celler monopoly-investigating committee (BW—Jul. 23'49, p21) has started its fall hearings. It is searching for new ways to check the trend toward corporate mergers.

As the new year nears, these three campaigns will pick up momentum, and you will begin to see what the new government philosophy for handling monopoly means to business.

I. Philosophy

Here's the nub of Administration philosophy—if you can call it that: Bigness, of itself, is bad. Put in work-a-day terms, this simply means batting down the giants, shoring up small outfits.

No longer, for example, will Justice Dept. lawyers be content with convictions for conspiracy in restraint of trade. Now they think they have a green light to break up concentrations of industrial power wherever they exist.

In deciding ways and means, however, the antimonopolists are having to worry over trends and questions that make the trust-busting of Teddy Roosevelt's day look like child's play.

For one thing, the problem isn't so clear-cut as it was back in the days when Standard Oil was broken up. Today, the villain is oligopoly—the Big Threes and Big Fours who together dominate an industry and are harder to get at than a Big One.

- **Disagreements**—For another, there's disagreement among the trust-busters themselves as to why they want to hit bigness. Some say the giants keep growing by gobbling up the small fry; others say size breeds inefficiency.

There's the debate over "hard" versus "soft" competition. Do you insist that naked competition have full play? Or do you protect the weak from price discrimination?

And note this: The added concentration of industry that came out of the war has prompted government to go all-out on both regulation and break-up of big business.

II. Prosecution

The Justice Dept. is going to take several major cases to court, beginning this winter. Charges have been drawn, and grand-jury indictments handed down in the following cases:

DU PONT-GENERAL MOTORS-U. S. RUBBER—To cut G.M. and rubber loose from du Pont.

BIG FOUR MEAT PACKERS—To break them up into 14 independent, integrated, going concerns.

AMERICAN TELEPHONE & TELEGRAPH—To split off Western Electric, divide it into three competing firms.

A.&P. STORES—To divide A.&P. into seven regional chains, split off its manufacturing subsidiaries, dissolve its produce-buying company.

This sets the pattern you can expect Justice to follow in many another industry. FTC has already put the finger on tin cans, linoleum, copper, liquor, plumbing equipment, tires, office machines, automobiles, biscuits, farm machinery.

Ready for court action is a civil break-up suit against the Big Three in tobacco.

III. Regulation

New members John Carson, the cop leader, and ex-Sen. James M. Mead will give added New Deal flavor to FTC decisions. The commission is pushing ahead on cases affecting these major issues:

- **Delivered pricing.** The steel industry, after long negotiation, is now willing to accept an FTC order (page 19) that requires the steel companies to give buyers the choice of either an f.o.b. price or a delivered price.

- **Maximum discount.** An FTC order in the works would prevent tire manufacturers from giving an extra discount to customers who buy more than car-load quantities.

- **Exclusive dealing.** Backed up by the Supreme Court decision in the Standard

Oil of California case (BW—Jun. 18'49, p21), FTC is drawing a bead on a raft of consumer-goods industries that tie up their dealers with contracts preventing them from handling the products of competitors.

IV. Investigation

Rep. Celler made it clear at the outset of his committee's investigation into monopoly power that, unlike antitrust probes in the past, his inquiry would not make the size of industry a sacred cow.

So, in its hearing, the committee is trying to determine whether it is better (1) to accept the fact that some industry must be giant, and exert public pressure by regulation along the lines of policing of utilities, or (2) to arrive at some arbitrary break-point between good and bad bigness, then subject the oversized to the break-up cure.

- **Prevention**—Celler is also toying with using an ounce of prevention: He wants to see whether there is something government can do to make it possible for small outfits to stay independent, big ones to disgorge.

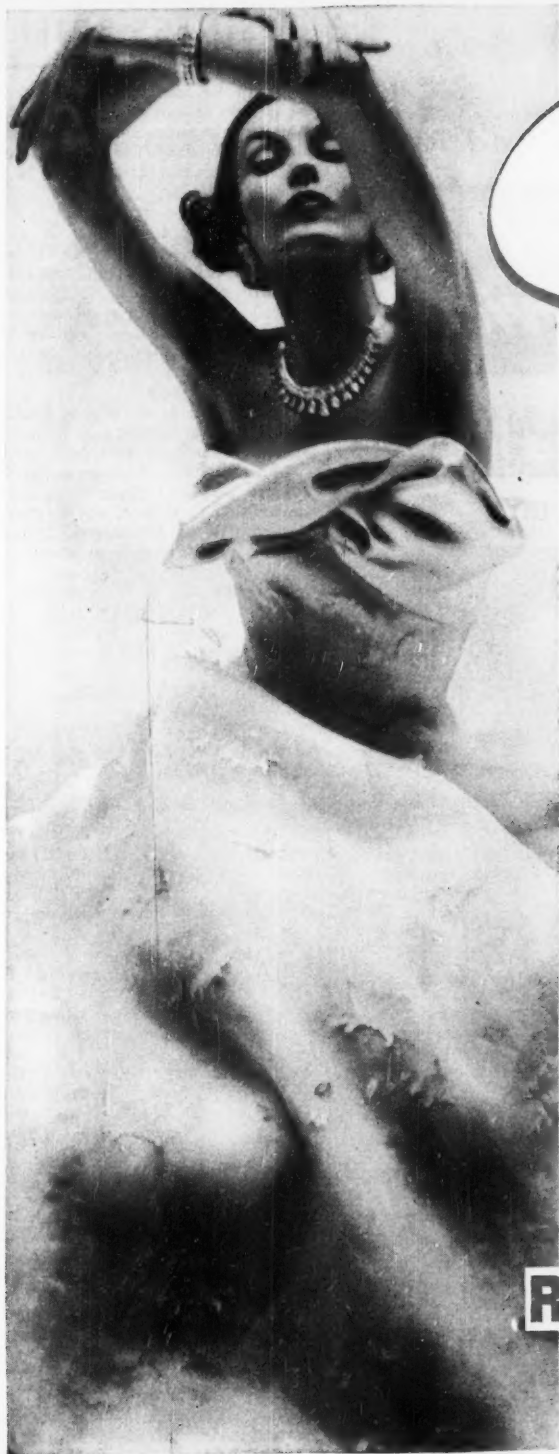
He's getting Treasury Dept. estimates of what inheritance and capital-gains taxes are doing to speed up mergers. He wants to know what changes are needed to make it possible for the owners of a little company to turn down merger offers and still not worry about how their heirs are going to meet death taxes. Also, he wants to know how you can let, say, du Pont distribute its G.M. holdings without punishing its stockholders with heavy capital-gains assessments.

V. Outlook

What does all this mean, in the long run? Big business is going to find itself increasingly on the defensive—just because it is big.

And it is likely to be dealing with an Administration whose hand has been strengthened by passage of the Celler-Kefauver bill, which bars acquisition by one corporation of the physical assets of another where FTC rules that competition would be lessened. The bill has passed the house (BW—Aug. 20'49, p15); it is fairly certain to go through the Senate next year.

Big business can't expect much sympathy from the courts. On the issue of splitting up giant corporations, the courts have upheld the government—in motion pictures and Pullman. And, as for nipping incipient monopoly in the bud, the courts have praised FTC as a body of experts whose decisions need not be questioned.



Steel For My Lady's Gown

Hidden within the glamorous fabric of my lady's gown is a story of steel—and steel service.

Tiny steel hooks and eyes . . . steel zippers and snap fasteners aid in achieving lines of beauty. Steel needles, pins and shears help to fashion the dress. Steel spinning machines and looms play important roles in creating the soft, luxurious fabric. Chemical apparatus, much of it stainless steel, cradles its synthetic yarns, its colorful dyes.

Ryerson Steel Service is an important factor throughout the chain of modern dress-making operations. Because the many thousands of Ryerson customers include needle makers . . . machine makers . . . textile mills . . . dye companies . . . and quite probably the automobile company whose steel truck delivers my lady's gown to her home.

Ryerson Service has met the myriad steel needs of industry for over 100 years. Thus Ryerson has contributed, in no small measure, to the efficiency of American business and the continued rise in standards of living.

There's a Ryerson plant near you and while the steel strike has depleted our stocks, we can still give fairly good service. So call us when you need steel—no matter what the kind, size or quantity.

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PHOTOGRAPH BY AVEDON FROM HARPER'S BAZAAR

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• Robbins & Myers lends a *willing ear* when it comes to powering problems—and willing hands design and produce motors that are *right* for each job.

Standard Motors? Yes! We make them. And they're mighty good motors, too. But we never hold back when *deviations* from standard can better meet the needs.

DON'T TAKE MOTORS FOR GRANTED. Standard motors were never intended for *every* application, and—even on some simple installations—their use can prove expensive. After all, the motor is but *one element* of any complete machine, and it should be given the same searching scrutiny all other parts receive.



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BY THE HUNDREDS. *Special Motors?* Yes! If you need them. But we like to think of such motors as *standards* for specific requirements. Robbins & Myers has developed hundreds of *specialized-standards* for as many different uses.

So, whether your needs are of the *off-the-shelf* kind; or standard with certain changes; or types designed expressly for *your* particular use—you'll find R & M ready with progressive ideas and cooperation it's a *pleasure* to work with.

DO THIS! Robbins & Myers is big enough to serve your every need, *completely*—yet not too big for *flexible* low-cost production. A letter addressed to Dept. A-119 will get things started promptly; incurs no obligation. *Write today.*

AN R & M CHANGE IN MOTOR DESIGN IMPROVED PERFORMANCE HERE

This new "Aristocrat" Centrifuge, made by Phillips-Drucker, St. Louis, manufacturers of surgical pumps and special laboratory equipment, uses an R & M motor with a special short stack to improve the centering action. Result: a better, better-looking product with performance "far beyond expectations." R & M motors and motor parts are always a mark of quality. Sizes range from 1/200 up to 50 h.p.

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BUSINESS BRIEFS

Southern Ry. dieselization, slated for completion in another year, means that Alabama coal mines will lose a 200,000-ton-a-year market. The road has told coal suppliers that it isn't going to renew its contracts.

Monopoly and competition in U.S. business will be studied by the Harvard Graduate School of Public Administration. A \$10,000 grant from the Merrill Foundation for Advancement of Financial Knowledge will lay the groundwork for an exhaustive investigation.

Natural-gas needs of Niagara Hudson Power Corp. would be met by a contract with the New York Natural Gas Corp. if FPC and state authorities approve. Niagara Hudson, which serves upper New York State, will eventually use natural gas to replace 12-billion cu. ft. of manufactured gas yearly.

Ford won't shut down next week, as scheduled (BW—Nov. 5 '49, p. 29), due to the steel shortage. Its steel mill is producing welded sheets big enough for body sections. And Ford is even able to ship steel to some suppliers.

Vanadium Corp. has found a new bed of uranium ore in Utah that it describes as "very promising."

Television news: NBC has separated its video and radio operations under a new organizational setup. . . . CBS will gross a considerable amount more in annual video receipts with Pillsbury Mills' shift of its House Party program from ABC.

The decline of steam locomotives has put American Arch Co. out of business. The New York corporation made arch bricks for locomotive fire boxes.

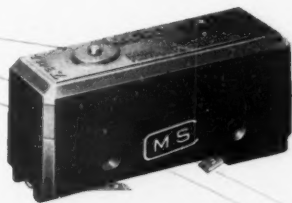
One \$100-million utility would result from the merger of South Carolina Electric & Gas Co. and its wholly owned South Carolina Power Co. if the state public-service commission approves. The parent company says that the merger will help facilitate the financing of the \$34-million construction program it is planning.

Sewell L. Avery's troubles with his managements continued this week when Louis Ware, president of International Minerals & Chemical Corp., resigned as a director of U.S. Gypsum. Last summer, president W. L. Keady resigned when chairman Avery got back into active management of the company.

He made the first MICRO Precision Switch...

and every millionth one since...

yet he's still in his thirties!



To see Joe at his daily work, supervising production in the MICRO plant at Freeport, you'd scarcely suspect that he put together the first MICRO precision switch ever built—he looks so young to be a veteran of industry!

He is young—still in his 30's—but it was only a dozen years ago that MICRO SWITCH was formed, a pioneer in the field of true precision switches for electrically controlled products and equipment!

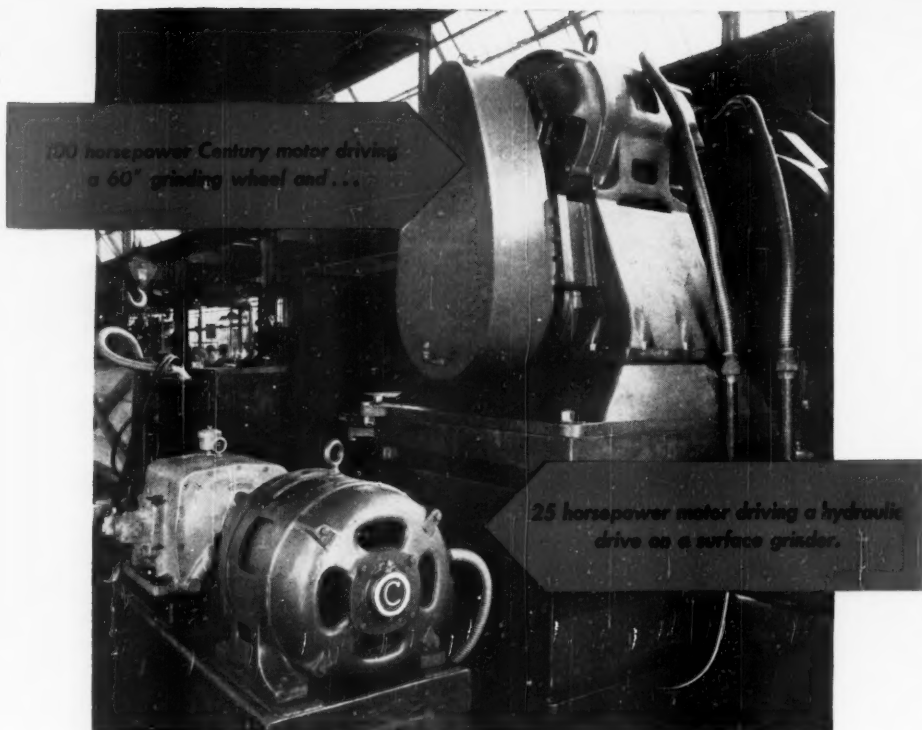
Joe is one of the original group of young men who had the courage and vision to foresee a great future for a switch capable of incredible swiftness of operation (.003 to .005 second) . . . a switch of such precision that, even at highest speeds, its positive operation could be relied upon to be accurately repeated throughout the switch life!

Young men of special skill and high determination, devoted to proving the worth of an idea, willing to accept a challenge born of the ever-changing, ever-insatiable demands of modern industry! Young men like Joe here, who by tradition makes a sentimental ceremonial point of assembling and testing—personally—every millionth unit produced! . . . That, perhaps more than any single factor, is responsible for MICRO SWITCH's continued growth and leadership in the precision switch industry.

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MICRO...

first name in precision switches



100 horsepower Century motor driving a 60" grinding wheel and...

25 horsepower motor driving a hydraulic drive on a surface grinder.

100 H. P. *Century* MOTOR — Driving a 60" Grinding Wheel Provides a Smooth Production Combination

This 100 H.P. Century Motor operating a huge 60" surface grinder and the 25 H.P. Century motor operating the feeder mechanism, is one of the hundreds of thousands of Century drives used in the precision production industries.

The unusual freedom from vibration designed and built into Century motors, contributes to the precision grinding at the business end of the grinder that was intended by the manufacturer of this fine tool.

The rugged mechanical design of Century motors are suitable not only to precision applications like this but also for the heavy shock loads required in some industrial operations.

From Century's wide range of types and kinds of motors, in sizes from 1/6 to 400 horsepower, you can select the correct motor to meet the exact requirements of your machines. The properly selected Century motor on your machine tools, conveyors, processing machinery, etc., helps to increase productivity, keep maintenance costs low and reduce plant shutdowns caused by improperly applied motors.

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TAXES

Wartime Excises on the Skids

Pressure to reduce or repeal the levies, from manufacturers, retailers, and consumers, is growing. And Congress will have more time to listen in 1950—which is an election year.

Last week's fur-coat ruling by the Bureau of Internal Revenue looks like a final move in a losing battle. The ruling: that the 20% wartime excise tax on fur coats will also apply to all fur-trimmed coats after next Mar. 1. The battle: the bureau's attempt to retain the excises imposed during wartime in the face of mounting pressure for their repeal by manufacturers, retailers, and consumers.

And the chances are getting better and better that Congress will either repeal or reduce these taxes when it gets back to work next January.

• **Pigeonholed**—Back in June, a bill to restore the prewar rates was approved by the Senate Finance Committee. But it never got to the Senate floor. For one thing, during the rush to adjourn it couldn't compete for Congress' time with the Administration's "must" bills. For another, there was strong opposition to any measure that would cut revenues by \$1-billion in the face of a growing federal deficit (BW—Nov. 5 '49, p21).

But next January the situation will be different. A good part of the President's "must" program has finally been disposed of—one way or the other. So the excise bill's priority has risen. Businessmen, trade associations, and consumer groups are certain to step up still further their pressure for cuts. And any upturn in business activity would hold down the deficit in the fiscal year that begins next July.

Another argument for the change: 1950 is an election year.

So prospects for action on the excise repealer seem bright for 1950.

• **Opposition**—It won't have easy sailing, though. There are many men, both in the Treasury Dept. and in Congress, who oppose it. They think that—good times or bad—there are sound arguments for keeping the present rates.

Among their arguments, the one that's likely to carry the most weight is that the \$1-billion of revenue involved is indispensable in this era of big peacetime budgets. But these men also contend that repeal of the taxes won't actually boost sales of the products and services involved (one of the biggest points made by proponents of the repealer bill). They say that income level, amount of savings, and uncertainty over what the future will bring can weigh much more heavily in prospective buyers' minds than a 10% or 20% price differential.

• **Support**—Backers of the bill point out that the question of revenue was a secondary one when many of the excises were adopted—that the emergency functions, such as discouraging travel or diverting money from luxuries into war bonds, were paramount. So, they say, now that the war emergency is over, these "emergency" taxes should come off.

The President's demand for higher corporate taxes may, strangely enough, enhance the excise bill's chance of passage. To get his corporate-tax proposal through, the President may give his O.K. to lower excises to sweeten the pill.

Excise Taxes: Past, Present—and Future?

	Prewar (Rates in Percent)	Current	Probable Future
Radios, phonographs, and parts.....	5%	10%	5%
Household refrigerators	5	10	5
Telegrams, long-distance phone calls.....	10	25	10
Admissions, dues	10	20	10
Automobiles and parts.....	2-3	5-7	2-3
Cosmetics .....	..	20	10
Furs .....	..	20	10
Jewelry .....	..	20	10
Luggage .....	..	20	10
Sporting goods .....	..	10	0-5
Transport of persons.....	5	15	5
Transport of freight.....	..	3	..

WHAT'S YOUR ANSWER

to this New York State business quiz?

1. One tip-off to the wealth of a market is the amount of life insurance in force per person. How does N. Y. State rank? 1st; 5th; 10th?
2. There is a record total of 565,000 business firms now operating in N. Y. State. How many represent the net increase since V-J Day: 4,000; 14,000; 140,000?
3. N. Y. State has 27% of the nation's banking resources. But how many state-wide banking organizations: 50; 25; 1?

1. 1st. 2. 140,000. 3. Only one...and it's Marine Midland — a banking organization that can well serve your business. State-wide coverage means efficiency. Your checks and drafts are quickly collected. You save time and money. And at your fingertips you have the suggestions of bankers who know local business conditions first hand. It's profitable to do business in New York State...and to bank with Marine Midland Trust Company of New York.

Marine Midland Banks serve...

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New York City

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Albion
Alexandria Bay
Antwerp
Attica
Avon
Batavia
Binghamton
Copenhagen
Corinth
Cortland
Depew
East Aurora
East Rochester
Elmira
Elmira Heights
Endicott
Evans Mills
Fulton
Holley
Horseheads

Jamestown
Johnson City
Lackawanna
Lockport
Malone
Medina
Middleport
Niagara Falls
North Tonawanda
Nyack
Oswego
Palmyra
Phoenix
Rochester
Snyder
Sodus
Tonawanda
Troy
Watertown
Watkins Glen
Webster
Westfield
Williamsville
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TRUST COMPANY**
of New York

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Member Federal Deposit Insurance Corporation

ASK
STOKES

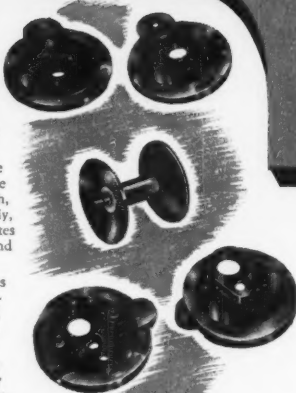
Reel Savings Made by Automatic Molding

RECENTLY, the Horrocks-Ibbotson Company, Utica, New York, changed over to automatic molding, with Stokes fully automatic plastics molding presses. Production of the side plates for their famous Sea Level Winding Reel was increased from 60 per hour to 270 per hour. Press labor cost was cut 90%.

In addition, a two minute molding cycle was obtained with the 9-cavity mold on the automatic press, with a minimum of flash, and almost no deburring costs. Previously, 6-cavity hand molds required six minutes molding time, with medium flash, and high deburring costs.

Completely automatic molding on Stokes automatic molding machines at the Horrocks-Ibbotson plant has increased mold life; and reduced material loss from 10% of actual weight to 4%.

Stokes can tell you whether your plastic parts can be economically produced by automatic molding . . . just send the parts or blueprints for free analysis.



F. I. STOKES MACHINE CO.
5956 TADOR ROAD
PHILADELPHIA 20, PA.



WRITE for Bulletin No. 741 describing the high-production Stokes Completely Automatic Molding Press.

Stokes makes Vacuum and Special Processing Equipment, High Vacuum Pumps and Gages, Pharmaceutical Equipment, Industrial Tabletting and Powder Metal Presses, Plastics Molding Presses, Water Still and Special Machinery.

STOKES

KNOWS
HOW

Cases in Point

U. S. Tax Court settles several hundred each year that throw light on important points of Internal Revenue Code.

Though Congress amends the Internal Revenue Code only once or twice a session, tax law is always being changed—by the U. S. Supreme Court, by the Commissioner of Internal Revenue and by the U. S. Tax Court.

The Supreme Court makes the most basic alterations through decisions that determine constitutionality or spell out the intent of Congress. Most of the minor revisions are made by the Commissioner of Internal Revenue.

• **Tax Court**—But on an intermediate level, there are a few hundred cases every year involving issues that, though neither basic nor minor, throw light on important points of law. They usually end up for decision in the U. S. Tax Court.

Despite its name, the Tax Court is really an administrative agency whose findings can be tested in regular federal courts. But since federal judges rarely feel competent to question the complicated decisions of the Tax Court, its rulings usually stand.

Here is a roundup of some of the more significant recent Tax Court rulings:

• **Nonprofit Profits**—Are the profits of a nonprofit organization taxable? In a case brought by the Chattanooga Automobile Club, the Tax Court said yes.

The Chattanooga club was not organized for profit, has no stock outstanding and issues no dividends. Its sole purpose is to further the interests of owners and users of pleasure cars—by lobbying for better roads and traffic regulation, and by furnishing maps, towing service, and insurance.

In 1944, the club showed a profit of almost \$600. But, on grounds that it was nonprofit—and therefore tax exempt—the club filed no tax return. BIR, however, billed the club for \$142 in taxes due.

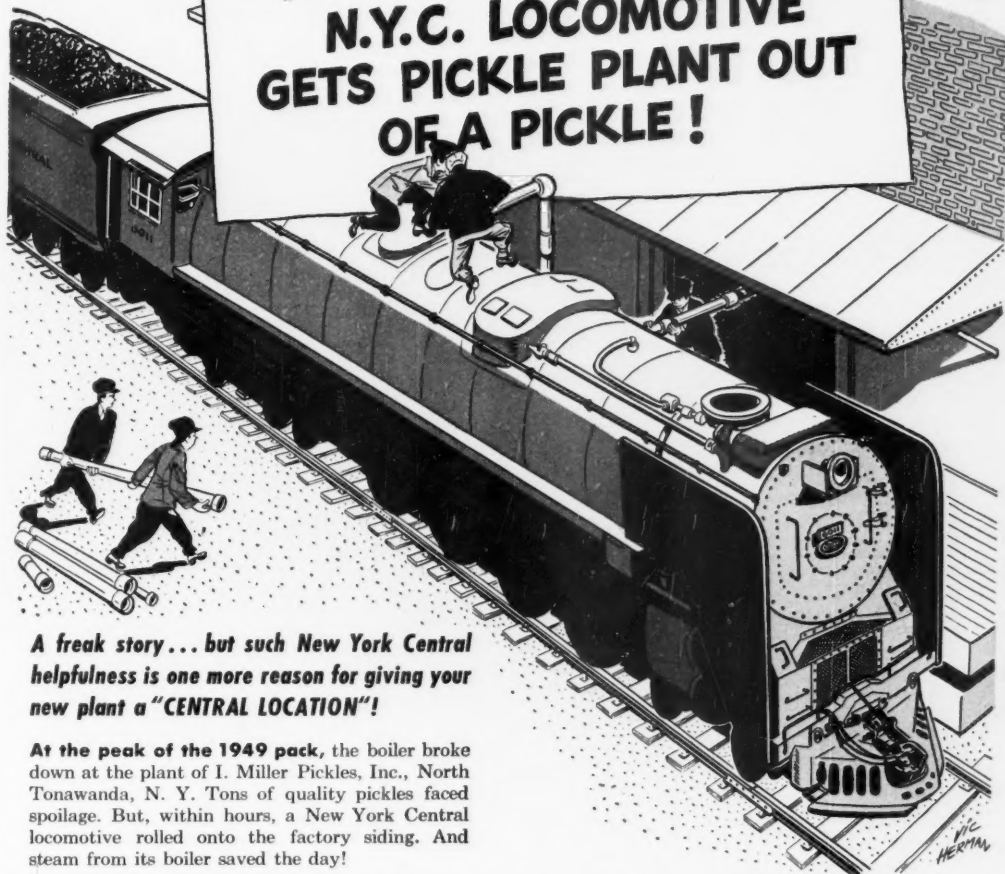
The bureau has held that no organization should be considered tax-exempt if its primary activities produce a profit. And, in the bureau's view, the primary activity of the Chattanooga club was a rendering of services at lower costs than obtainable elsewhere.

A majority of the Tax Court agreed with BIR.

• **Licenses and Assets**—Is a license a capital asset? In a case involving two Florida liquor dealers, the court said yes.

In 1944, two men formed a partnership to run a retail liquor store in

N.Y.C. LOCOMOTIVE GETS PICKLE PLANT OUT OF A PICKLE!



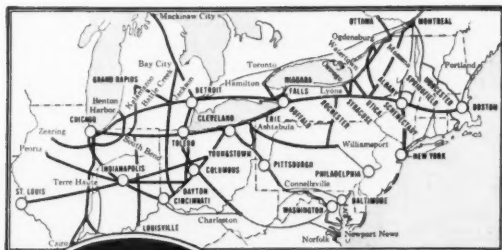
A freak story... but such New York Central helpfulness is one more reason for giving your new plant a "CENTRAL LOCATION"!

At the peak of the 1949 pack, the boiler broke down at the plant of I. Miller Pickles, Inc., North Tonawanda, N. Y. Tons of quality pickles faced spoilage. But, within hours, a New York Central locomotive rolled onto the factory siding. And steam from its boiler saved the day!

That might never happen to you. But in scores of other situations New York Central's quick-thinking cooperativeness can save you losses or increase your profits. It's a *plus* added to the many

strategic advantages of giving your new plant or warehouse a "Central Location."

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New York Central

The Smooth Water Level Route

FREE BOOKLET—"FINDING A CENTRAL LOCATION" tells you in facts, figures and pictures the industrial advantages of the key area New York Central serves. It's yours for the asking. And so is the expert site-finding service it describes. Write Industrial Development Dept., Room 1314-A, 466 Lexington Ave., New York 17, N. Y.

Take a tip from successful dentists . . .



A successful dentist gives consideration to every detail that contributes to your comfort and confidence. The crisply clean towel his nurse adjusts for your protection is a good cotton towel. A successful dentist knows from experience that his patients have a marked preference for cotton towels.

Successful business men who have consideration for their customers and employees make certain their washrooms are stocked with good cotton towels.

EVERYONE WILL THANK YOU

FOR CHOOSING



GOOD COTTON TOWELS

1. Your customers and employees who appreciate your thoughtfulness in providing the best.
2. Washroom attendants (and often fire inspectors, too) who appreciate the absence of unsightly litter.
3. The executive who approves maintenance bills—cotton towels are reasonable in cost.



No question about the thanks you will get from employees, customers and guests when your washrooms are supplied with good cotton towels by Fairfax. Evenly woven of quality cotton, Fairfax towels are firm in texture yet soft to the touch and so absorbent. They leave no fuzz—make no washroom litter. Fairfax towels and towel-

ing are made by the makers of famous Martex bath towels.

Remember that Linen Supply firms, many of whom use the descriptive name **SERVILINEN**, can keep you constantly supplied with fresh, clean cotton towels, uniforms and napery on a low cost, service basis. No initial investment required. Look in your classified phone book under Linen Supply or Towel Service.



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Jacksonville. At that time there was a limit on the number of liquor licenses the city would issue. To start in business, the partners had to buy a license, which was renewable, from a going concern. They paid a premium of \$7,250 over and above the annual license fee of \$750.

When the partners got around to filling out their first year's tax return, they treated their total license outlay as a cost, and deducted it from net income.

But the Bureau of Internal Revenue said nothing doing. BIR held that only the annual fee of \$750 could be deducted. It billed the partners for another \$4,600.

The dealers took their case to the Tax Court, arguing that the \$7,250 premium was a nonrecurring cost of getting into business.

The court agreed with BIR. In its view, the license was a capital expenditure having an indeterminate useful life beyond the taxable year.

• **Goodwill**—Are business records and goodwill capital assets? In a case involving a New Mexico accountant, the Tax Court again said yes—but added, be sure you mean goodwill.

The taxpayer ran a moderately successful general accounting office in Albuquerque. In 1941, his office furniture, fixtures, and supplies had a depreciated value of \$2,500.

But when he sold out to an El Paso firm in that year, he got \$2,500, plus \$1,250 for helping in the transfer of accounts, plus a percentage of all fees the successor firm was to collect from Albuquerque clients in the next five years.

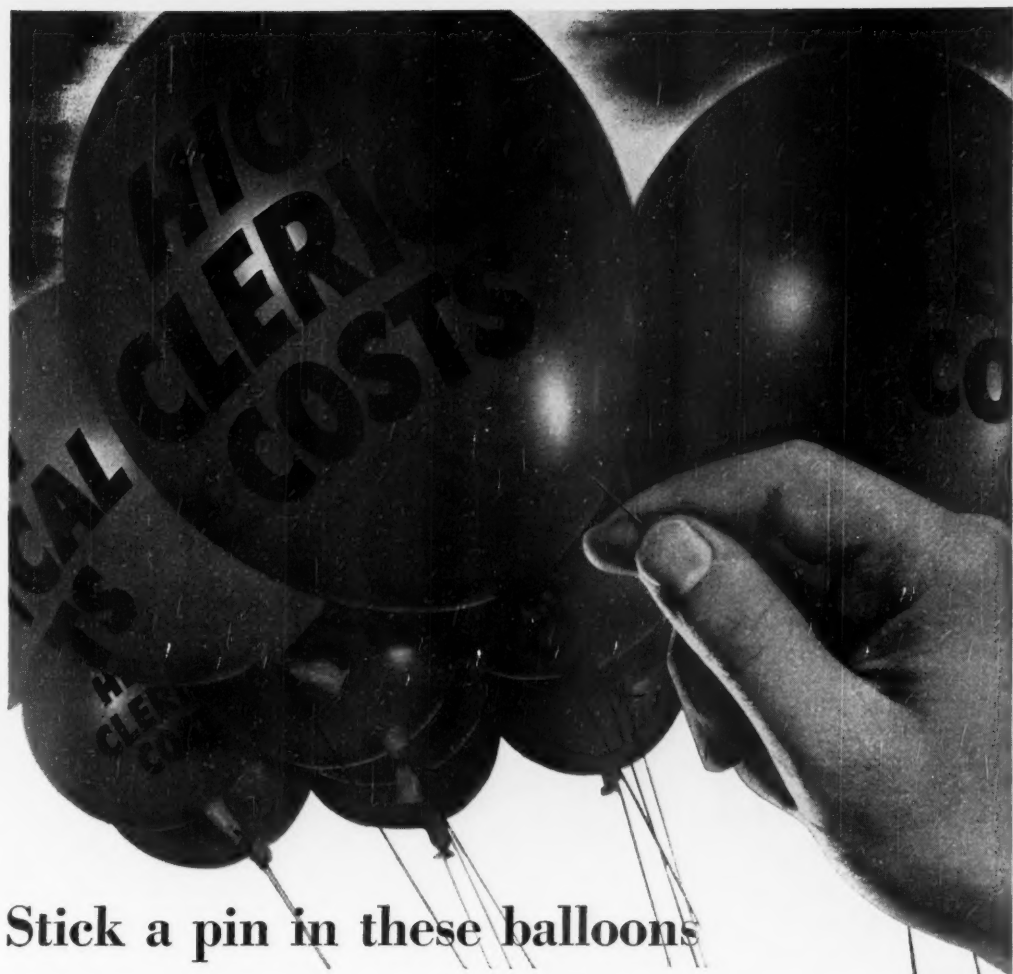
The payments in excess of \$2,500 were for the seller's goodwill and for an agreement not to compete in the state for six years.

In making out his tax return for 1941, the accountant treated the \$2,500 payment as income from sale of a capital asset; the \$1,250 was handled as ordinary income. But the percentage payments were treated as a capital gain.

BIR disapproved of the way the percentage payments were handled, and billed the seller for \$1,500 in back taxes.

The accountant appealed. His argument: by agreeing not to compete, the seller was assuring the buyer undisputed enjoyment of the goodwill the buyer had bought; the percentage payments, thus, were continuing payments for the sale of goodwill.

The court handed down a Solomonian decision. The percentage payments, the court ruled, were half for the sale of goodwill (and therefore taxable as capital gains) and half for the agreement not to compete (taxable as ordinary income).



Stick a pin in these balloons

● Clerical costs have ballooned skyward in every department of business. But wise management men are deflating these costs by mechanizing their paperwork procedures the Addressograph way. The net result is reduced costs which represent 100% profit dollars.

Addressograph is the 1950 method for pricking the balloons of rising costs in your business. New models, new features, new adaptability also provide better business controls, better employee relations, better customer relations.

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information can be imprinted, listed, distributed or tabulated on all types of business forms many times quicker than possible with any other kind of business machine—and 30 to 50 times faster than typewriter—always with 100% accuracy. Think of the time saved, dollars saved, of the errors eliminated.

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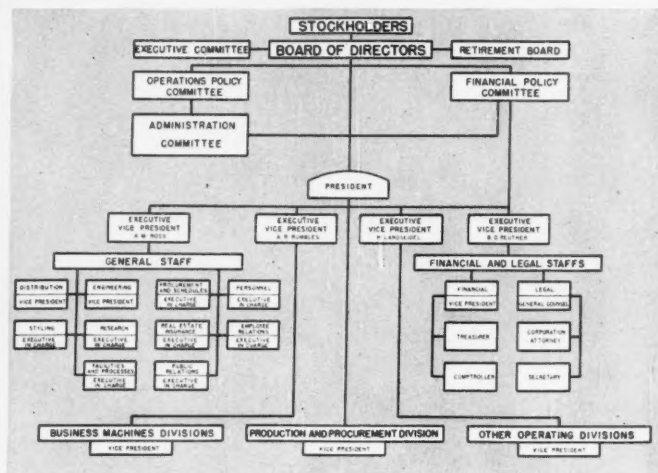
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MANAGEMENT



RemRand Rebuilds at the Top

Reorganization of executive setup puts chief emphasis on a more efficient sales operation. Other major aim is decentralization of authority within framework of over-all company policy.

Ideas, like tangible objects, usually wear out. That holds for management ideas, too. An organizational setup that worked beautifully 10 years ago may be inadequate to cope with today's problems.

• **In Tune With the Times**—That thought is what led Remington Rand, Inc., to re-examine its organizational structure. This week the company lifted the cover off the new organizational pyramid it has set up to keep its production and sales activities in tune with the times.

Remington Rand's new organization has two main objectives: (1) decentralization, to let each division make its own decisions within the framework of over-all corporation policy; and (2) a strengthened setup topside, to work out what that policy will be.

• **Sales Record**—There had been little decline in sales to spark the reorganization. On the contrary: In the fiscal year ended Mar. 31, 1949, the company had managed to roll up the second-biggest sales figure in its history: \$148-million. However, net earnings of \$10-million were considerably below those of the two preceding years, although they still represented the third-biggest income in the history of the company.

Nevertheless, the management felt that it was time to take stock of the

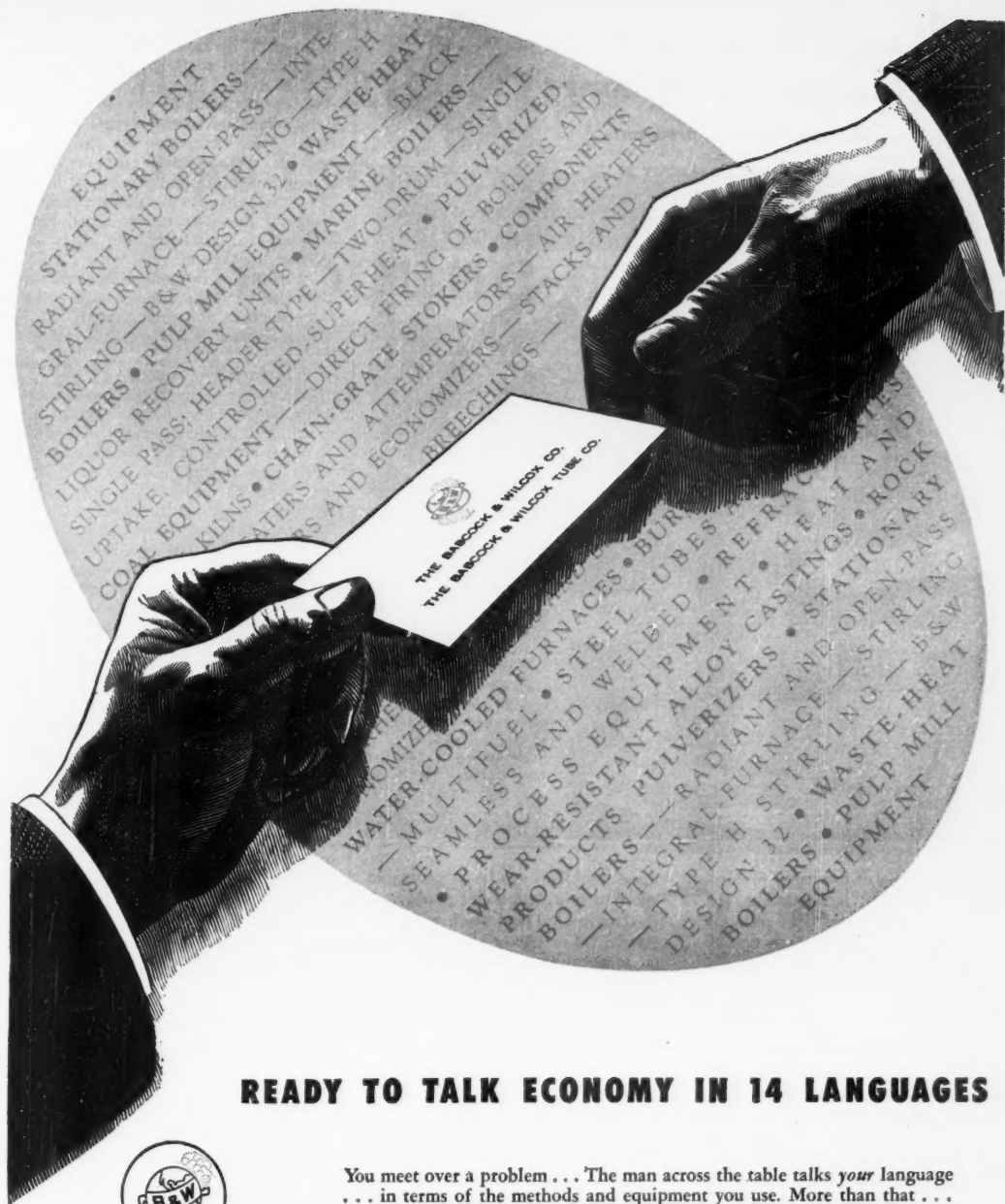
situation and see if everything was being done in the best possible way.

The management decided that it was not.

• **Series of Mergers**—The history of Remington Rand's original organization had a lot to do with the way things were going. The present corporation was set up back in 1927 to consolidate, under a single management, the businesses which had been built up by Remington Typewriter Co., Rand Kardex Bureau, Inc., and Dalton Adding Machine Co. Subsequently, it absorbed several other corporations, including these: Accounting & Tabulating Machine Corp., Safe-Cabinet Co., Lineatime Mfg. Co., Inc., Baker-Vawter Co., and Kalamazoo Loose Leaf Binder Co.

The idea behind this large-scale amalgamation was, of course, that combining the companies would effect a lot of savings in production and distribution. To a certain extent, it worked. It was no longer necessary, for example, for each of the newly joined companies to maintain individual distribution systems. A great deal of other overlapping services were trimmed, too, through such devices as establishing a central research laboratory for all products.

• **Economics Not Realized**—But it still wasn't perfect. For one thing, some of



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& WILCOX**

You meet over a problem . . . The man across the table talks *your* language . . . in terms of the methods and equipment you use. More than that . . . whatever industrial idiom is employed . . . his recommendations make sense in the universal language of economy: lower initial cost, because he is fluent in his *own* language of design, engineering, and construction in the 14 major equipment groups listed above; lower maintenance and operating cost, because he never stops studying *your* language . . . is proficient in the problems of your particular application.

It will pay you, as it has so many others, to talk with this man early in your planning for modernization, extension, or original construction of *any* kind of plant.

It pays to use your custom molder's know-how

says another electrical equipment producer



No. 11 in a series on Plastics Skill at Work...



PROJECT:
Light weight transformer tap changer with cover

CUSTOMER:
Pennsylvania Transformer Co.
Pittsburgh, Pa.

MOLDER:
International Molded Plastics, Inc.

MATERIAL:
High quality general purpose Durez



Skilled Planning replaced an open porcelain transformer tap changer with an enclosed Durez phenolic plastic unit. New product is safer, looks better, costs less

Precision Production is due in large part to accuracy of the mold. Tap changer molds designed and made by International meet all requirements.

● This example of profitable molder-customer relations is interesting, not because it is unusual but for a precisely opposite reason—because it is typical.

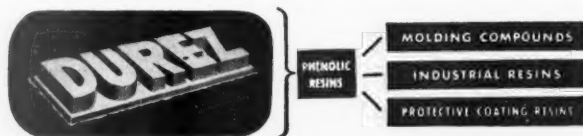
Pennsylvania Transformer Company showed their custom molder an improved design that met higher safety standards than previous models. Following the custom molder's habit of applying constructive thought before going ahead, this molder suggested engineering changes that led to better molding technique, greater operating efficiency, and lower production costs.

Plastics men with practical know-how and active interest in their cus-

tomers' problems can be of profitable service to your design and production departments. Their skill with the versatile Durez phenolics should help you in developing products that look better, wear longer, and sell faster.

Deciding which phenolic compound will do the job best is a small part of a good custom molder's field of cooperation. Call your molder in early, when he can be of greatest service. It's an advantage, too, when you have the specialized experience of a Durez field technician at your planning sessions.

Durez Plastics & Chemicals, Inc., 4011 Walck Rd., N. Tonawanda, N. Y.



PHENOLIC PLASTICS THAT FIT THE JOB

the top executives in the merged companies had their own ideas about how to run the divisions of the company that had been their babies before the consolidation. For another, the broad diversity of products that Remington Rand offered often meant that two divisions were competing for the same business. A prospective customer who had an accounting problem might have two Remington Rand salesmen scrambling for him—one trying to sell him punched-card machines, the other an electric bookkeeper.

That sort of intramural competition kept the company from realizing the full economies of a unified setup.

● **Sales Stressed**—Emphasis of the whole reorganization plan is on the creation of a better selling system.

Under the old system, the sales organization was divided into a multitude of divisions, each responsible for sales of one or two products. A salesman of office typewriters, for instance, did everything he could to maximize typewriter sales—and nothing else.

Under the new system, each salesman will still specialize. But he will also be on the lookout for opportunities to sell other Remington Rand products. And where he used to make money only from the sale of his specialty, he will now get commissions when he lays the groundwork for sales of other lines. This way, Remington Rand hopes to glean sales that otherwise might be lost, through the salesman's concentration on only his own product.

● **Wider Knowledge**—That, of course, requires that each salesman know something about the entire Remington Rand line. The new sales plans provide for that through regular "personal progress conferences." These will help to pool the salesmen's knowledge of products and services as well as their selling experience.

Remington Rand thinks that its new decentralized plan of organization will lick plenty of other problems, too. But all up and down the new family tree that Remington Rand has drawn for itself you can see that the emphasis is on better and more efficient selling.

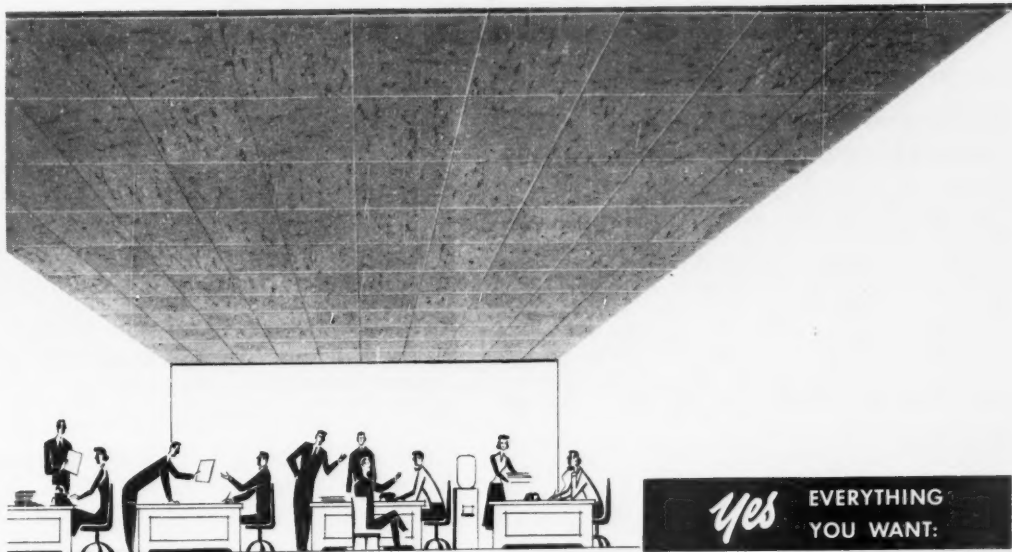
● **Modeled on G.M.**—The company doesn't claim that everything in its plan is strictly original. James H. Rand, Jr., president and board chairman, admits that he borrowed heavily from General Motors—which, he feels, has a top-notch organizational chart.

Remington Rand's top management, like G.M.'s, now consists of a president (Rand) and four executive vice-presidents. The field in which each of the executive vice-presidents operates is carefully defined. Within those limitations, however, each of them has considerable freedom of action. The four are:

Arthur R. Rumbles—management

Why Beautiful *Acoustone* has everything you want in Sound control

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And everything the experts want! Beauty, long life, low upkeep, light weight all count big with men whose business is building. And, incombustibility, another feature of ACOUSTONE mineral acoustical tile, is mighty important with fire insurance and building inspectors.

You're wise to check and compare as these experts do—as architects, engineers, and interior designers do. Then you'll discover the *unique combination* of advantages that sets ACOUSTONE apart—that means everything you want in sound control.

BEAUTIFUL

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United States Gypsum • CHICAGO

Yes

EVERYTHING
YOU WANT:



**BEAUTY &
ECONOMY**



LONG LIFE



LIGHT WEIGHT



INCOMBUSTIBILITY



EXPERT PLANNING SERVICE

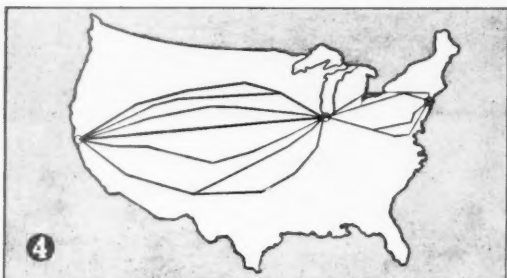
Your U.S.G. acoustical contractor will study your sound control problems, make recommendations—entirely without obligation. Write us for the name of the authorized contractor who serves your territory.



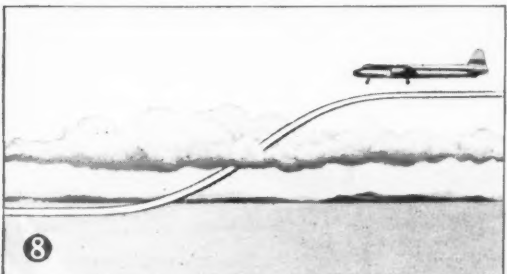
United sets new record

33% improvement gives travelers GREATER YEAR-ROUND DEPENDABILITY

With the development of an improved technique of air transport operation, United is now giving passengers a higher standard of dependability in air travel. Its DC-6 Mainliner 300—with the altitude to fly over weather and the range and reserve power to fly around it—has increased the assurance of reaching your destination on time. We cannot expect to make a 100% record of on-time performance; no transportation system has ever been able to. But our improvement is steady—this winter our record will be better than ever before. To see how United's technique works out, follow the pictures. ➡



MULTIPLE ROUTES: Or your pilot may fly around weather. Map shows multiple routes between the East and California. Similar multiple routes to other Pacific Coast points.



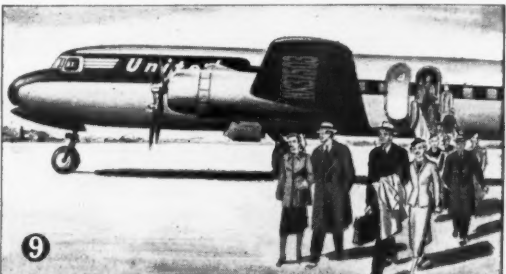
COMING IN: Electronic aids—Instrument Landing System and Precision Beam Radar—enable United to land under conditions of low visibility that formerly "closed in" airports.



TAKE-OFF TIME: When you go aboard, the sky may be overcast. But you cannot judge flying weather "by looking out of your window." Sunshine is seldom more than 15 minutes away.



AT ALL TIMES: Your captain keeps you informed of the course of your flight and other things of interest about the trip, through the plane's public address system.

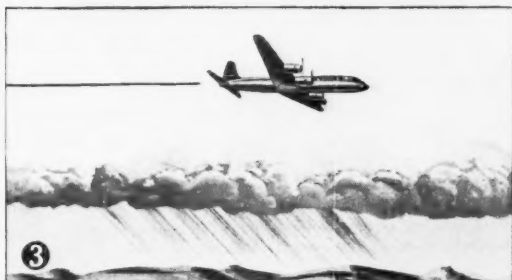


ARRIVAL ON SCHEDULE: United's on-time arrival record has been improved 33% over the previous year. And United expects to improve dependability further in the months ahead.

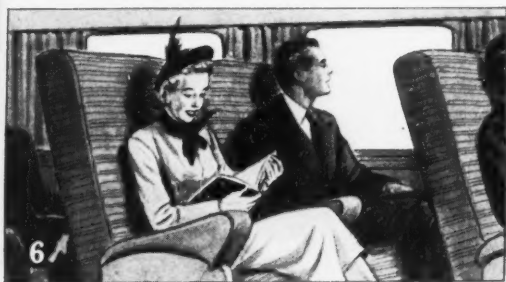
d for on-time performance!



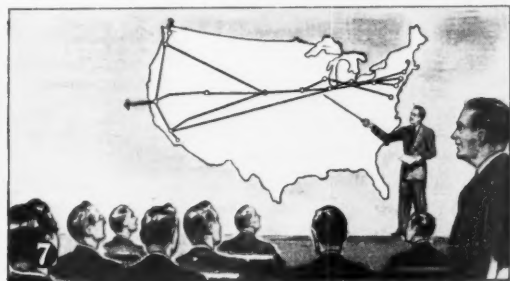
IN A FEW MINUTES: The four powerful engines of your DC-6 Mainliner 300 have carried you through the overcast into the clear, bright climate of the "sunshine level."



AN HOUR LATER: Glancing down, you may notice clusters of clouds. But United's DC-6 Mainliner 300 has the altitude to fly over weather in the clear upper air.



CONSTANT COMFORT: No matter how high a level you fly, pressurized cabins of the luxurious DC-6 Mainliner 300s keep the atmosphere at low-altitude comfort.



MEANWHILE: Your whole flight is being monitored at United's Operations Control Center in Denver, the "room with a 10,700-mile view" which helps keep United on time.

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THE NATION'S NUMBER 1 COAST-TO-COAST AIRLINE



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Canada—largest single U. S. customer, third greatest trading nation, fourth industrial producing nation in the world.

Stop that global research. Mr. Dillthrop, and concentrate on the vast market just above your friendly northern border.

Canada offers you opportunities unlimited. With industrial output almost tripled in value since 1939, this market is growing fast. Since 1817 the Bank of Montreal has helped it grow . . . has grown with it. And as the first Canadian bank with a United States office, established in New York in 1859, it has a long and successful record of helping United States business extend its interests in Canada.

So, if you're planning expansion, talk Canada with us. We have the experience, the organization, the facts, the figures. We shall be delighted if you will call on us through your own bank, through our offices in New York, Chicago or San Francisco, or through our Business Development Department in Montreal.

* * *

Conditions for locating new plants in Canada are good. We can give you the specific information you need. Write for our new, fact-packed 100-page booklet "Canada Today." It tells how rich your future with Canada can be. Address your request to any of our U. S. offices or to our Business Development Department in Montreal, and ask for Booklet B-1.



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controls and business machines (sales).
Albert M. Ross—research.
Bernard O. Reuther—financial and legal.

Harry Landsiedel—foreign operations.
The production division is under the supervision of a vice-president: B. B. Bond. He reports directly to the president.

• **Three Sales Divisions**—The major reshuffling of jobs and responsibilities involved in the new setup have come in Rumbles' sales division. Directly under Rumbles is another vice-president, Al N. Seares. These two men direct sales and service operations through three separate domestic-sales divisions. And the general sales manager of each division also holds the title of vice-president of the company. They are:

T. J. Norton—Management Controls Division (tabulating machines and systems, accounting machines, photo records).

H. V. Widdoes—Business Machines & Supplies Division (typewriters, adding and calculating machines).

H. A. Hicks—Dealer Sales Division (portable typewriters, adding machines, and other equipment and supplies sold through retail stores).

(Sales of electric shavers aren't under Rumbles at all, because their distribution system is so different from that of office equipment. So the electric-shaver division is lumped with foreign sales under Landsiedel.)

In addition to the three major sales divisions, Rumbles and Seares also are responsible for conducting research for the sales organization. This job includes research into markets, methods, and product-utilization. All product development, however, is done in Ross' research department.

• **"Packaged Service"**—The chief benefit Remington Rand expects to gain from its new sales setup is the ability to offer a packaged service.

If a customer wants a record-keeping system, the management controls division can offer him all the related Remington Rand products that go into that system. There will no longer be any need for the customer to weigh the individual merits of each product in relation to other Remington Rand products. Similarly, if the customer wants office machines, the salesman who calls on him can analyze his needs, suggest the exact equipment to do the job.

• **More Sales, More Profits**—Company officials think that the over-all new organization plan gives them a setup which will market Remington Rand products more effectively—and more profitably. Employee comments on the plan, published in the company's own RemRand News, ranged all the way from "a well thought out plan to simplify our sales operations," to "long overdue."

Who's the Expert?

New book by editors of "Who's Who" will list men who know about everything from turtles to basing points.

For years the fat red "Who's Who in America" has been a standard reference source. Early next month, its publishers, A. N. Marquis Co., Chicago, will bring out a new volume that it hopes will eventually match the success of "Who's Who." Title of the new work: "Who Knows—and What: Among Authorities, Experts and The Specially Informed." Purpose of the book is to list, in easy-to-find reference form, the experts and specialists in subjects likely to be asked about, but hard to find in existing reference books.

• **Specialisms**—The new "Who Knows—and What" will key brief informative and biographical sketches of some 16,000 specialists, experts, and authorities, to an index list of over 30,000 "specialisms." These specialisms are subjects the editors think people will want to know about. They include bee culture, turtles, feather collectors, grasshoppers, icebergs, basing-point practice, blast furnaces, submarine cables, crossword puzzles, artesian wells. Most of the experts in the volume are listed under at least two subjects.

To use the work, a searcher, who wants to find an expert on artesian wells, simply looks up that subject in the index. There he finds listed a page number and a biography number on that page of one or more experts on artesian wells. Biographies of the "knowers" give the expert's name, specialty, age, education, what he has done or written in his particular field, his address, and whether he is available for consultation.

• **Exploratory Venture**—The Marquis editors look on the new volume as an exploratory venture. Nothing like it has ever been put out, they insist. They feel it should reach an even wider audience than "Who's Who" among publications, libraries, schools, and business and industrial firms.

The work makes no attempt to duplicate existing directories of scientists, doctors, lawyers, engineers and other professional men by occupation, vocation, or hobby. Nor does it list detailed specialties of limited, purely scientific interest. Emphasis is on subjects of general interest—not specialized or scientific subjects of small reference use.

• **Two Years to Do**—Compiling the volume took two years, and a special full-time staff of seven people, in addition to Marquis' regular staff of 50. The first edition will be 10,000 copies. The volume will sell for \$15.70.



WHEN

ALLIED IS ON YOUR

CONSTRUCTION JOBS

BUILDINGS GO UP FAST



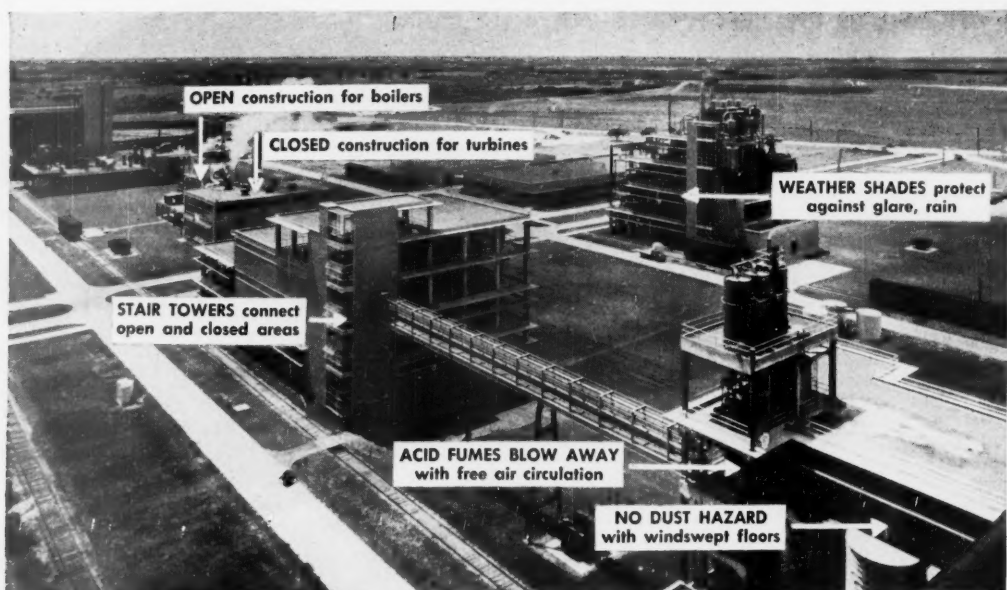
• If the heat is on for quick construction, Allied offers you the facilities of three plants equipped to fabricate structural steel.

Here engineers skilled in precision shortcuts team up with a multiplicity of equipment to speed fabrication and eliminate bottlenecks.

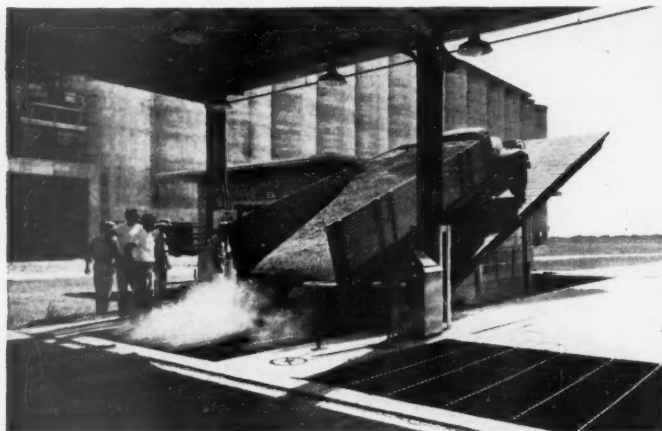
When structural members arrive on location, erection crews maintain the same fast pace. They dexterously "button up" structurals... stand your building "on its feet" on the due date.

2400 tons structural steel.
Chevrolet Commercial Body Plant,
Indianapolis, Indiana

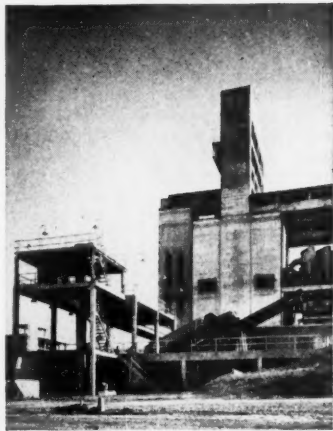




OPEN-AIR DESIGN of Corn Products Refining Co. plant at Corpus Christi offers new safety features.



GRAIN IS DUMPED into receiving hopper as truck is lifted on hydraulic platform. In plants where this is done in closed-in area, grain dust forms a potential hazard.



ATOP SILO is long room without walls. Constant breeze sweeps dust from floor.

Plant Design Idea: Safer Without Walls

When industrial engineers of H. K. Ferguson Co. started work on a new unit for Corn Products Refining Co. at Corpus Christi, they decided to take advantage of the Texas climate. The result was this advanced-design plant. Its most distinguishing feature: Only buildings housing processes which must be under cover are completely closed in. The boiler room, for instance, is out in the open; steam turbines are in a con-

ventional building. The rest of the buildings have no walls or roofs—although wide sunshades protect workmen against sun and sudden rain storms.

The plant processes milo maize (a native southwestern broom corn) into starches, oils, cattle feeds. By the nature of the job, open construction offers definite advantages. Grain dust itself is a constant hazard (it can explode from spontaneous combustion when con-

fined). One of the first processing steps is seeping the grain in dilute sulphurous acid. In conventional plants, this operation is done in a large, closed-in building where acid fumes hover constantly; in this plant open construction lets the breeze blow them away immediately.

Although this plant was built with Texas weather in mind, Ferguson engineers believe that the basic idea could be adapted to other areas.



Prescription fillers — that's us!



Just as it takes a trained apothecary to blend a prescription properly, so it requires a trained staff—such as ours—to coordinate the many factors of plant location.

Bring your prescription to us and we'll show you the many advantages of locating in the B&O area.

Without obligation and in confidence, our Industrial Development Staff will submit for your consideration a complete *custom-made* study to fit *your* individual problem.



Ask our man!

Industrial Development representatives are located at:
 NEW YORK 4, N. Y. • BALTIMORE 1, MD.
 PITTSBURGH 22, PA. • CINCINNATI 2, OHIO
 CHICAGO 7, ILL.



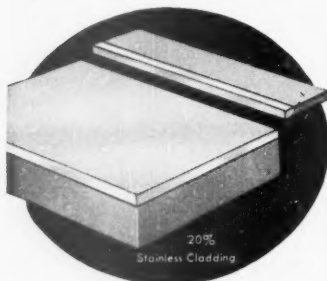
Baltimore & Ohio Railroad

Constantly doing things — better!

Get the facts about

PERMACLAD

STAINLESS CLAD STEEL



AND SEE HOW MUCH YOU CAN SAVE

You save money, improve your products and increase sales when you fabricate your products from PERMACLAD. It's an entirely new and different material with the surface characteristics of Stainless steel and the excellent forming qualities of Carbon steel.

Corrosion Resistant! Easily Formed!

It's corrosion resistant and has better ductility than other material of equal corrosion resistance. Shower stalls, deep freeze units, automotive trim, food and chemical vessels and many other products are now being made of PERMACLAD. Profit by getting the facts about PERMACLAD now. Write for free folder. Alan Wood Steel Company, Conshohocken, Pa., Dept. P-21.



The finer the finish the finer the product
USE

PERMACLAD

ALAN WOOD STEEL COMPANY
Conshohocken, Pa.

Other Products—

AW Algrip, Abrasive Floor
Plate • AW Super-Diamond
Floor Plate • Billets • Plates
• Sheets (Alloy and Special
Grades)



CITIES

Business Information, Please

Richmond (Va.) Chamber of Commerce spends 13% of its budget on readable, accurate economic data.

Do you know:

The income of consumers in your city?

How much they spend on each item in their budgets?

What it costs to distribute your product from your plant, as compared with distribution costs from other U.S. cities?

How your community compares with others in strikes and labor unrest?

Whether the population is moving into—or out of—the center of your town?

You would have the answers to all these questions—and a lot more, besides—if you were a member of the Richmond (Va.) Chamber of Commerce.

• **The Answers**—On the 16th of every month, you would get the answers in a readable, four-page Research Bulletin from the chamber's research department.

You would also get a thorough-going analysis (one page) of business trends in Richmond through the preceding month; on the other side of the page, you would have a day-by-day tabulation of the total payroll to be paid out in Richmond the following month. Once a year you would get a broader business survey, and two quickies: Richmond Facts (as of today), and Richmond Trends (from 1929).

• **Problems**—On the basis of a recent Research Bulletin, Richmond businessmen this week were applying a new standard of judgment to an old problem—how to set up sales quotas in a given area. This leaflet, "Sales Quotas in Virginia," gives a manufacturer step-by-step directions for checking the relative demand for his product in every county and city in the state. From the tables in the bulletin, he can figure out what his marketing-potential should be, check it against his actual sales.

Or take the August bulletin, on "Family Expenditures." For this one, the chamber researcher used a Bureau of Labor Statistics survey. From it, he figured out a breakdown of incomes and expenditures of Richmond families.

• **Director**—The man at Richmond's research wheel is Alan S. Donnahoe (picture, above). Donnahoe started with



RESEARCH CHIEF Donnahoe tells business facts of Richmond's industrial life.

the chamber in 1936 (he's 33 now) as a sort of odd-job, man-about-office. One of the odd jobs was to gather the few, haphazard monthly and annual figures that came the chamber's way. And Donnahoe began to see what statistical method could do.

In 1937, the chamber set up its research department, with Donnahoe as the boss. He has held the job ever since—with time out for war service. Since 1948, he has also been the chamber's assistant executive manager.

• **Slow Going**—The first few years, progress was plodding. Donnahoe added to the statistical files, dug up old data for comparison and reference.

But just having the data on hand wasn't good enough. Donnahoe wanted to broadcast his material. He began to send out a monthly business review. He didn't send many—only companies that said they were interested got it. Early in 1938, he started the Research Bulletin. The payroll calendar came along in 1947.

• **Costly**—Service like this costs money. The Richmond chamber spends 13% of its annual budget of more than \$100,000 on its research department. That's a lot, comparatively speaking. A 1947 survey by the U.S. Chamber of Commerce showed that only 17 chambers of 740 throughout the country had a full-time research director.

• **But Worth It**—But if the research costs time and money, the Richmond chamber isn't fussing. It's convinced

that it gets its money's worth and more.
Here's why:

The Research Bulletins go to some 500 of the chamber's 3,000-plus membership. They also go to more than 100 out-of-town companies that are interested in locating—or selling—in Richmond. It's indexed each month by Public Affairs Information Service, New York, and through it, goes out to individual companies the country over.

Publicity like this is just so much gravy for Richmond. But the real payoff is the job the research material does for those who see it.

For example:

Banks have determined where to establish new branches on the basis of Donnahoe's neighborhood-population studies.

Mortgage companies use the studies on the housing situation to determine their lending policies.

Management and labor have both used the local cost-of-living studies in wage negotiations.

Retail stores plan advertising and promotional sales on the basis of payroll forecasts.

National and regional distributors use chamber data to fix territories and quotas.

Sales managers use data on business trends to guide their buying and selling.

Banks, and merchants who cash checks for customers, use the payroll surveys to determine how much cash to keep on hand.

Local managers of national companies keep the home office alerted to Richmond trends via the chamber reports; some of the home offices check on sales this way.

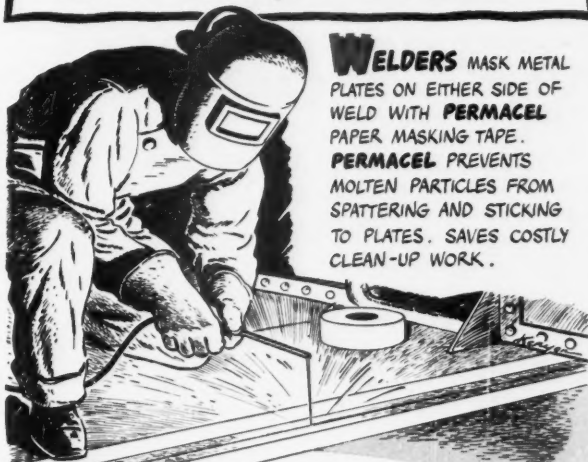
Municipal and state agencies frequently turn to the research department on tax and budget problems.

• **Poll**—The service gets to grass roots because Donnahoe makes a point of finding out what chamber members want to know. Last January, he took a poll to find out which of his department's projects rated the highest (taxation got the vote). And he also asked them to rate the efficiency with which his department was handling each job. He got an endorsement from the members for the over-all job; and he also got a clear line on how to direct his own work.

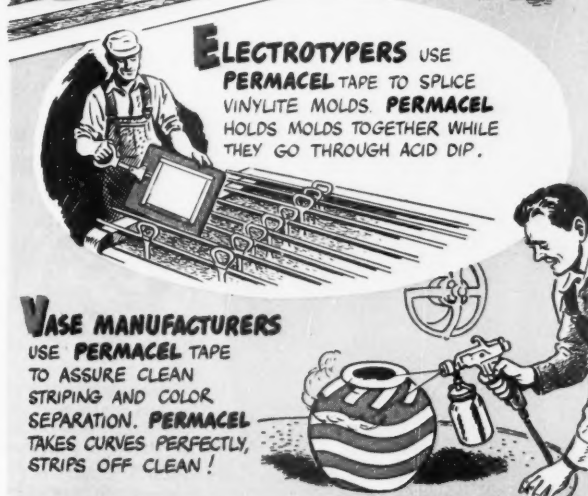
• **Requirements**—But when it comes to knowing his own objectives, Donnahoe doesn't have to ask any questions. To him, there are two musts for putting his kind of job over:

(1) The material has to be readable. That means it has to look good on the page, it has to make sense, fast. He keeps his verbiage pruned, his charts

HOW TAPE HELPS INDUSTRY SAVE TIME, CUT COSTS...



WELDERS MASK METAL PLATES ON EITHER SIDE OF WELD WITH **PERMACEL** PAPER MASKING TAPE. **PERMACEL** PREVENTS MOLTEN PARTICLES FROM SPATTERING AND STICKING TO PLATES. SAVES COSTLY CLEAN-UP WORK.



ELECTROTYPERS USE **PERMACEL** TAPE TO SPLICE VINYLITE MOLDS. **PERMACEL** HOLDS MOLDS TOGETHER WHILE THEY GO THROUGH ACID DIP.

VASE MANUFACTURERS USE **PERMACEL** TAPE TO ASSURE CLEAN STRIPING AND COLOR SEPARATION. **PERMACEL** TAKES CURVES PERFECTLY, STRIPS OFF CLEAN!

✓ **PERMACEL TAPES** are laboratory-developed, carefully tested for tensile strength, adhesion, stretch. What's more, **PERMACEL** offers you a complete line of industrial tapes!

✓ **LET OUR TECHNICAL REPRESENTATIVES** come and help you find ways of cutting time and costs with **PERMACEL TAPES**.

Permacel®

INDUSTRIAL TAPES

INDUSTRIAL TAPE CORPORATION • NEW BRUNSWICK, N. J.

If you use Alloy Steels, you'll need this **FREE BOOK!**

● Here's a handy booklet which gives you quick answers to a lot of questions on both commercial and aircraft quality alloy steels.

Do you want to know what grade to order?
This booklet tells you.

Do you want to know if the size and grade you need are available?

All you have to do is check the comprehensive information contained in the listings.

Do you want to know the cost of any particular alloy steel?
There is a complete price list included.

● Send for your free copy of this valuable, informative and time-saving Inventory and Price List. Just fill in and return the convenient coupon. Do it right away.



SYMBOL OF SERVICE
FOR STEEL USERS

United States Steel Supply Company
Dept. C-119, 208 S. La Salle St., Chicago 4, Ill.
Without obligation on my part, please send me a
FREE copy of your handy booklet, "Alloy Steel
Inventory and Price List."

Name..... Title.....
Firm Name.....
Address.....
City..... Zone..... State.....

UNITED STATES STEEL SUPPLY COMPANY



Warehouses: BALTIMORE • BOSTON • CHICAGO
CLEVELAND • LOS ANGELES • MILWAUKEE • MOLINE, ILL. • NEWARK • PITTSBURGH
PORTLAND, ORE. • SAN FRANCISCO • SEATTLE • ST. LOUIS • TWIN CITY (ST. PAUL)
Also Sales Offices at: KANSAS CITY, MO. • PHILADELPHIA • TOLEDO • TULSA • YOUNGSTOWN
Headquarters Offices: 208 S. La Salle St. — Chicago 4, Ill.

UNITED STATES STEEL

plentiful and clear. He believes that "statistical method has not even passed the kindergarten stage, so far as its potential is concerned in the field of executive decision and business management." And the main reason is that it is poorly presented.

(2) The material has to be accurate. This is just plain common sense, Donnahoe says. "Most of the users of our data are our own members, and we would be very foolish to provide them with misleading information."

He feels so strongly on this point that he wants to get chambers of commerce to clean their houses, get quit once and for all of the charges of bias and unreliability that they are often open to. One of his pet projects is to set up a joint council of local chamber research experts. These would issue a blue ribbon "seal of approval" for the research publications of local chambers that met the council's tests.

● **New Breed**—Another dream of Donnahoe's is to develop a breed of statistical "middleman" to serve practical businessmen. A middleman would understand the basic principles of research and statistical method, but he wouldn't lose the policy-making perspective in the statistical trees. He wouldn't be afraid to cut through the professional terminology so that the businessman could get the basic point.

● **What Good Is It?**—Donnahoe is a glutton for work, but it has to be practical work. The question to ask on any such research, says Donnahoe, is: Does it point to action of some kind or not? If it doesn't, his advice is to chuck the project before it's started.

CITIES SPEND \$4-BILLION PLUS

The 397 largest cities of the nation (population over 25,000) spent over \$4-billion on their government in 1948, the Bureau of Census reports. That's \$500-million (or 16%) more than they spent in 1947.

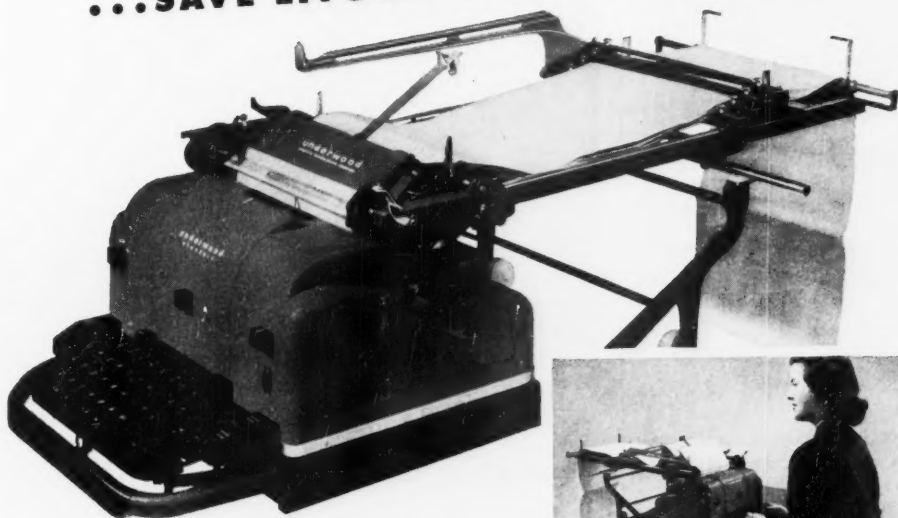
Operating costs got the lion's share—over \$2.8-billion. The biggest dollar increase under this head went for operation of schools—up \$71-million to \$633-million. Capital outlay took almost \$500-million, nearly half again as much as capital outlay for 1947. Most of this went into new construction.

If expenses went up, so did revenues. The same cities' take reached a record of nearly \$3.8-billion. That's 14% higher than in 1947. More than half the amount came from property taxes. Sales and gross-receipts taxes totaled \$345.5-million.

Municipal debt, which had leveled off in 1947, took an upturn last year. Borrowings for governmental purposes came to \$449.9-million. Gross debt rose \$250-million, to a grand total of \$7.5-billion.

No loose carbon paper to handle

...SAVE EFFORT...TIME...MONEY!



... with the New Underwood All Electric FANFOLD WRITING MACHINE

With this machine, your office workers never waste time, juggling messy, loose carbon paper. One simple, easy loading operation and they can type up to 1500 sets of waybills, freight bills, orders, requisitions, or other multi-copy forms . . . without changing carbons.

Instead of using loose or padded forms, you simply purchase the same forms printed in long continuous strips containing 500 to 1500 sets which are fed chain-like into the Underwood All Electric Fanfold Writing Machine.

Instead of employing loose sheets of carbon paper, the carbon paper is fed from long sheets or rolls. As each completed set of forms is discharged from the machine, the carbon paper is automatically moved into the next set of forms. The operator merely types and removes the completed forms, the machine does the rest.

In addition, the new Underwood All Electric Fanfold Writing Machine incorporates every modern refinement and feature essential to maximum operating simplicity and speed, including Underwood's renowned ALL ELECTRIC KEYBOARD.

It is a pleasure to operate this new Underwood. The same light finger-tip touch produces one or many perfect copies. Controlled electric power provides the energy that makes the operator's work simple and easy. Increased speed without fatigue is assured.

See this new Fanfold Machine at your local Underwood branch . . . or mail the coupon for full information, today!



Type your waybills and freight bills the Underwood All Electric way. Get more work...better work...in less time.



Move Carbons from each completed set of forms into the next set without touching or juggling messy single sheets of carbon paper...eliminate carbon waste...cut costs.



Zip! As each completed set is removed, the next set automatically feeds into position, ready instantly for typing... eliminate non-productive operations...speed up production.



Underwood Corporation

Accounting Machines . . . Adding Machines . . . Typewriters
Carbon Paper . . . Ribbons

One Park Avenue New York 16, N. Y.
Underwood Limited, 135 Victoria St., Toronto 1, Canada
Sales and Service Everywhere

© 1949



Underwood Corporation
One Park Avenue
New York 16, N. Y.

Please send me new illustrated folder describing the
New Underwood All Electric Fanfold Writing Machine.

Name of Company.....

Your name and Title.....

Street Address.....

City.....Zone.....State.....BW-11-12-49



Discover how wise management releases capital tied up in delivery and transport equipment.

The National Truck Leasing System supplies you with well-maintained and smart-appearing trucks to meet the exact needs of your business. We will even arrange to buy your present equipment at a fair price. Your investment in trucks is freed and made available for other business needs. *Your truck operation becomes a direct business expense instead of a capital liability.*

Truck leasing also saves executive time, eliminates maintenance worries and budgets truck costs in advance.

Call the phone number shown in your classified directory under this symbol.



NATIONAL TRUCK LEASING SYSTEM
Dept. 86, 23 E. Jackson Blvd., Chicago 4, Ill.

Have your secretary write today for our booklet explaining the basic advantages of truck leasing.

MARKETING



"SIMULCASTING" over radio and TV helps Cities Service cut costs during . . .

Television's Growing Pains

Almost everybody is making money out of television but the broadcasters. Eventually it will pay off for them, too. For number of advertisers and set-owners is growing rapidly.

The television industry has found that the darkness before the dawn is just a little darker than it expected. True, the broadcasters always knew that it would take some time before video began to pay off. But it looks as though they didn't figure that the trial period would take quite so long—or cost quite so much.

All the video networks are still in the red, a strain that is beginning to tell on them in one degree or another. As a result, they are having to retrench.

Most of the networks are cutting shows and personnel. In other cases, they have simply failed to restore the daytime and evening programs that had been trimmed in the summer. And all these moves follow in the heels of the industry-wide economies and firings that took place back in June (BW—Jul. 2'49, p28).

• **Bright Future**—It's obvious, though, despite these difficulties, that the long-range picture for TV is a bright one. The overall growth, though slow to show up as black ink in the broadcasters' books, is faster than anyone had dared hope.

This indicates that the broadcasters are now having growing pains, much like those that afflicted radio in its early years. And it may well imply that before

the industry settles down, there's considerable confusion ahead.

A look at a few figures will show just how far television has come at this stage of the game:

Sets in use throughout the nation now total slightly more than 2.5-million, according to American Telephone & Telegraph Co.'s latest report. That's a gain of about 250,000 in a month's time. A.T.&T. estimates that on Jan. 1, 1951, the figure will reach more than 6-million—the point at which video will begin to make money, some broadcasters think.

Total expenditures on television advertising grew from \$1-million in 1947 to \$10-million last year. And this year, says the Dept. of Commerce, they will reach \$28-million.

The number of advertisers using television has shot skyward. The latest Rorabough Report on Television Advertising shows that some 60 advertisers now sponsor network video shows, three times the number a year ago. National and regional spot-commercial users have, meanwhile, increased from 119 to 337; local retailers using spot commercials have jumped from 236 to 1,141.

Another survey, made by Ross Re-

ports, makes the interesting point that, as far as national and regional spot commercials go, "the same big names of radio's billings appear on the TV rolls," plus some newcomers. Four chief users are American Tobacco, Oldsobile, Ronson, Brown & Williamson. Beverages dominate the national-regional field (91 advertisers) with food products (84); then come household appliances (30), automotive and accessories (28), and toilet accessories (22).

The pattern for network shows comes out a little different. Drugs and toiletries come first (10 advertisers), food products next (9), tobacco products third (8). Again, a lot of big radio advertisers turn up on this list.

• **Type of Shows**—Ross' analysis of shows by type indicates this trend at work. Here are the shifts that have taken place in the past six months (the following figures are for shows, both network and local, visible in New York City):

Type of Show	No. of programs per week	
	Oct., 1949	May, 1950
Dramatic	44	18
Comedy-variety	14	16
Musical	26	38
Vaudeville	5	11
Interview, Exposition	24	30
Quiz, giveaway	17	20
Children's	23	31
Fashion, women's	14	17
News	17	16
Religious	5	5
Sports events	20	17
Sports news	10	9
Film	29	28

The trend away from musicals and other high-priced shows, again highlights an important point about television: It's an expensive medium. That's why advertisers are playing dramatic shows, with their smaller casts, for all they are worth. Maxwell House, for example, gave up its expensive \$15,000-a-week *Lamb's Gambol* (BW-Apr. 16 '49, p.30) for a new dramatic show called *Mama*. High-cost also undoubtedly explains why 74% of all the advertisers now in television use spot commercials, rather than shows.

• **Cost Cutting**—The expense of television has put a premium on finding ways to cut costs. To do this, a lot of advertisers use film instead of live shows (BW—Oct. 15 '49, p.70). Others have turned to "simulcasting"—broadcasting and televising a show at the same time and getting two shows for the price of one (plus the cost of the radio time). That's how Cities Service handles its *Band of America* over NBC (picture, page 50). Still other advertisers make a sound recording on tape of their television show, then edit the tape for radio broadcasting.

Another cost-cutting device is the so-called participation show—that is, one show sold to multiple sponsors. A good example of this is the *Cavalcade*



Which would you rather lose—property dollars or income dollars?

If disaster shuts down your place of business, you will suffer an income and a property loss. You need protection against *both*!

Property insurance alone won't protect you against loss of income, but Hartford's Business Interruption Insurance can do just that. If fire, storm, or other hazards insured against, force you to suspend business, Business Interruption Insurance can protect you against loss of anticipated earnings.

Business Interruption Insurance can give you *just what your business itself* would have given you if no interruption had occurred.

Here, briefly, is how Business Interruption Insurance protects you:

OPERATING STATEMENT FOR ONE MONTH

Before Fire

Sales	\$30,000
Cost of Merchandise	18,000
Gross Profits	\$12,000
Expenses	10,000
Net Profit	\$ 2,000

After Fire—WITHOUT Business Interruption Insurance

Sales	None
Cost of Merchandise	None
Gross Profit	None
Expenses continuing during shutdown	\$ 7,000
Net Loss	\$ 7,000
Add. Anticipated Profit Prevented	2,000
Total Loss	\$ 9,000

After Fire—WITH Business Interruption Insurance

Sales	None
Cost of Merchandise	None
Gross Profit	None
Income from Business Interruption Insurance	\$ 9,000
Expenses which continue	7,000
Net Profit	\$ 2,000

(Same as was anticipated had no interruption occurred)

Hartford's Business Interruption Insurance is adaptable to almost any business enterprise; stores, factories, garages, theatres, hotels, etc.

The Hartfords have prepared work sheets to help determine how great a loss you might suffer and how much insurance you will need to safeguard your income. Write for them—there's no obligation!

HARTFORD

HARTFORD FIRE INSURANCE COMPANY
HARTFORD ACCIDENT AND INDEMNITY COMPANY
HARTFORD LIVE STOCK INSURANCE COMPANY

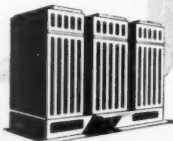
Hartford 15, Connecticut

Year in and year out you'll do well with the Hartford



**PERSONAL
to the
354
SAN ANTONIO**

TRAVELERS
Who visit
us
regularly!



We appreciate
your visits...
and we would
like to show you
...and your friends... that our newly-decorated
rooms, delicious food and superior
service are even better now! Coming back
soon?

**Skirvin
HOTEL**

Dan W. James, Pres.

OKLAHOMA CITY, OKLA.

Hospitality Heart of the State.
600 rooms from \$3.50!

Automatic
REZNOR
gas fired unit heaters



POPULAR

For industrial plants
For offices and stores
More sold than any other
Made since 1888
Catalog shows special
features. Write today.

REZNOR MANUFACTURING CO.
3 UNION ST. • MERCER, PENNA.

of Stars, carried by the DuMont network. It's sponsored by 14 different drug chains—Whelan in New York, Walgreen in Chicago, etc.—in 14 cities. Four drug or toiletries manufacturers also share the cost of the show, which plugs their products.

• **Others?**—The participating idea appears to be catching on. A Philadelphia advertising agency, Lamb & Keen, is now trying to interest a string of department stores and soft-goods manufacturers in a network video show worked on about the same basis as the Cavalcade of Stars, except that it would be on a bigger scale.

The agency's idea is to get enough sponsors to carry Ken Murray's Blackouts over 10 to 15 Columbia Broadcasting Co. stations. Local department stores would stand the cost of buying local time; the 30-odd manufacturers who signed up would pay the \$11,500 or so expenses weekly involved in putting the show on.

• **Other Effects**—But television's high costs have had still another effect: They have scared advertisers away. Some just haven't got that kind of money, while others figure that video hasn't built a mass audience big enough as yet to justify the cost.

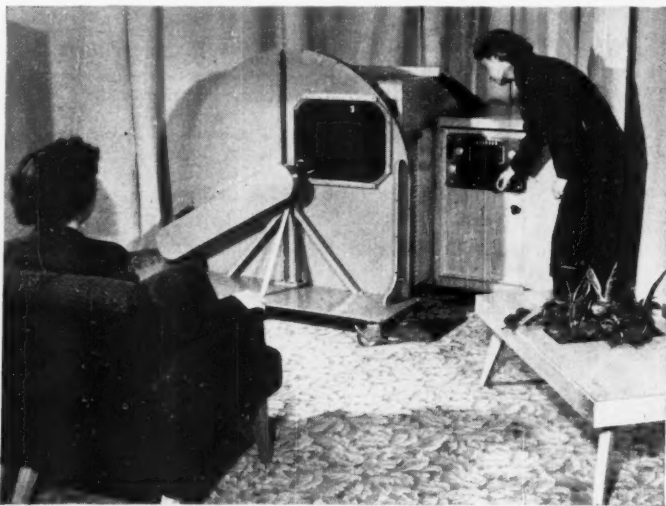
Meat Holdout

Chain stores fail in effort to get Chicago butchers to handle prepackaged self-service meat. It's permitted in other cities.

In the past few years, the practice of prepackaging meat for sale at food stores' self-service counters has spread over the nation (BW—Oct. 25 '47, p. 62; Apr. 17 '48, p. 56). Reason: It eliminates one of the two biggest bottlenecks in speedy customer service—the meat counter. (The other is the checkout counter.)

• **Only Holdout**—Today, Chicago is the only major metropolitan area where meat prepackaging is prohibited under contracts between the butchers' union and retail stores. And it will remain so for at least another year.

Four big chains, which operate some 900 stores in the Chicago area, did their best in this year's contract negotiations to get the union to change its mind. They only capitulated when the Amalgamated Meat Cutters & Butcher Workmen (A.F.L.) threatened to strike to enforce the ban. They weren't helped



Converter to End All Converters (Literally)

"We built it," said Dr. T. T. Goldsmith, research director for DuMont Laboratories, "because we were sick and tired of the claims of CBS." Dr. Goldsmith's statement, made before the FCC hearings on television, referred to this giant CBS-type device, which enables DuMont's 20-inch-tube black-and-white TV receiver to receive programs in color. DuMont is trying to convince FCC that color TV is not ready for the public.

It contended that this converter with its four-foot spinning disc, was unwieldy, unfit for any living room, and required a power supply that would blow out ordinary household fuses. CBS rebutted that it had never recommended its system for receivers with tubes larger than 12½ inches. FCC Commissioners Wayne Coy and Frieda Hennock also reproved DuMont, calling the demonstration "ridiculous" and "sideshow."

FOODS COST LESS

when delivered in Fruehauf Trailers!

This Trailer, with stainless steel exterior, was designed by Fruehauf engineers for the hauling of baked goods — another example of how the cost-cutting Trailer method can be "tailored" to the needs of practically any business having a transportation problem.



YES, in *all* kinds of hauling, more Trailer owners use Fruehaufs than any other make. That's because these owners know Fruehaufs haul the biggest loads, last longer, cost the least to operate.

And in the case of operators who formerly used *only* trucks...they have discovered that they can greatly reduce hauling costs by switching to Trailers — *because Trailers more than triple the work a truck can do.*

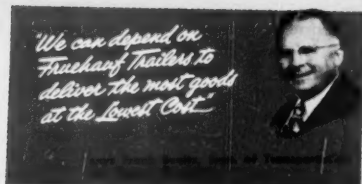
The Fruehauf line is complete — there's a Trailer for every hauling need. Each one is built with money-saving features found in no other Trailer.

If you do not use Trailers — possibly they could materially cut your hauling costs. Would you like to know the facts? Write us on your business letterhead for a "Transportation Cost Analysis." This service is yours for the asking — without cost or obligation. It may show you how to make important savings — write for it today. The Fruehauf Trailer Company, Detroit 32...Los Angeles 11... in Canada: Weston, Ontario.

UP TO 5 YEARS TO PAY! Qualified operators can have up to 5 years to pay — the best evidence you could ask for that Fruehaufs do last longer. Ask about our "pay as you earn" financing plans.

Trucks pay their share — and more — for their use of our highways. Although trucks make up only about 18% of all motor vehicles in the country, they pay over 32% of all motor vehicle taxes.

FRUEHAUF Trailers

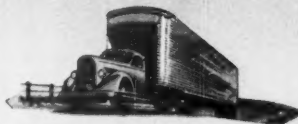
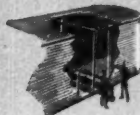


You get these Money-Saving Advantages with STAINLESS STEEL TRAILERS . . .



FRUEHAUFS HAUL BIGGER PAYLOADS — For comparable capacity, strength and durability, the new type Stainless Steel is the lightest Trailer on the road! Carries up to 4000 lbs. more payload than conventional units.

FRUEHAUFS LAST LONGER — There is no record of a Stainless Steel Trailer ever having worn out. All the basic structural members are built of lighter, stronger, longer-lasting Stainless Steel.



FRUEHAUFS COST LESS TO OPERATE — There is practically no upkeep cost on Stainless Steel. Never requires painting . . . resists corrosion . . . can't rust out. The first cost is virtually the last cost.

WORLD'S LARGEST BUILDERS OF TRUCK-TRAILERS

Research Laboratory of S. C. Johnson & Son, Inc. with tubular-plate-walled wax research tower now under construction. Frank Lloyd Wright Architect. Samuel R. Leitch, Consulting Engineer.



Air OF RESEARCH

RESEARCH: "Critical and exhaustive investigation having for its aim the discovery of new facts and their correct interpretation . . ."—WEBSTER.

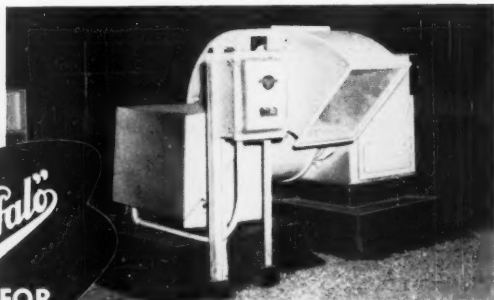
THE constant search for ways to develop and improve products is one of many ways in which "Buffalo" Fans team up with industry! An "experiment in behalf of the American housewife", the famous new Johnson wax research tower will enjoy air completely free of dirt and dust—a "must" for Johnson standards of product purity.

Hundreds of leaders like S. C. Johnson & Son have picked "Buffalo" fans to help make a better product. And many more firms are using these efficient, quiet-running fans on scores of other profitable uses—for comfort, for safety, for product and process control—for better productivity and increased profits!

Why not put the air in your plant to full use? Your nearby "Buffalo" engineering representative will give you all the facts. Call him, at no obligation.

BUFFALO FORGE COMPANY
458 BROADWAY BUFFALO, NEW YORK
Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

Branch Offices in all Principal Cities



"Buffalo"
**FIRST FOR
FANS**

"Buffalo" Belted Vents provide compact units for industrial and commercial ventilation.

any by the attitude of the independent retailers: The Associated Food Dealers of Greater Chicago, which represents 5,200 independents, agrees with the union in opposing prepackaging.

• **Proposals**—The four chains: A. & P.; Kroger; National Tea; and Jewel Food Stores. As inducements to the union, they offered:

(1) To employ only one woman to package the meat for each 20 butchers;

(2) To raise wages by \$5 a week for journeymen and managers working in stores that offered prepackaged meat; and

(3) To reduce working hours in those stores from the present 42½ hours a week to 40 hours.

• **Turned Down**—The union rejected the terms. And, in the case of National Tea, the local involved went so far as to authorize a strike to back up its position. So, one by one, the chains capitulated. Their only crumb of comfort: The new contracts provide that union and employers will continue to study prepackaging, and will hold discussions and demonstrations. Other terms of the contracts: Workers get a \$3-a-week raise; they continue to work a five-day, 42½-hour week. The contracts run for one year.

• **Opposition's Grounds**—The union opposed the prepackaging proposal on two grounds: (1) that self-service meat selling has not proved satisfactory for customers in other areas; and (2) that butcher employment would be reduced. R. Emmett Kelly, secretary-treasurer of Chicago Local 564 and vice-president of the international union, says that in five years, self-service would force 40% of the 6,500 butchers involved out of work.

The leaders of the independent retailers hold that meat self-service is still in the experimental stage. Its adoption, they feel, would force widespread changes in the buying habits of customers and stores. And there is plenty of evidence, they say, that consumers still prefer their meat cut and trimmed to their own individual tastes.

• **Chains' Point of View**—The chains, and other supporters of the idea, held that the convenience of self-service would increase the sale of meat and make possible higher pay, better working hours, and better job opportunities for butchers.

Even the chain operators, however, don't contend that self-service merchandising of meat has been perfected (BW—Oct. 14, p. 46). At the American Meat Institute's annual meeting this fall in New York, Joseph B. Hall, president of Kroger Co., made this point: "In self-service, a dissatisfied customer has no one to whom to complain. She just doesn't come back."

And James Cooke, general manager of Philadelphia's Penn Fruit Co., added

that self-service meats had suffered from "too much initial success and too little technical know-how."

• **Into Line**—Aside from Chicago, the last holdout against prepackaged meat was St. Louis. Just a few days before the Chicago negotiations reached their crisis, butchers and retailers in St. Louis agreed to its introduction there.

MARKETING BRIEFS

Christmas gifts given by U.S. companies this year will cost them about \$97-million, up 30% over last year. Ekco Products discovered this when it surveyed department stores and corporations to find out the sales potential for its kitchenware in this growing market.

A detailed analysis of the wholesale dry-goods business appears in a 194-page report issued last week by the Commerce Dept. The report is called "Dry Goods Wholesalers' Operations"; it shows how to improve operations and reduce costs. Price is 45¢ per copy.

Chain stores and mail-order houses sold an estimated \$2.3-billion during September, according to Commerce. That's about 2% less than they sold during September, 1948.

Retail cooperation is spreading. The Bronx Retail Appliance Dealers Assn., encouraged by the success of a similar group in Queens (N. Y.), is laying plans for cooperative buying and servicing of appliances.

Sears, Roebuck & Co. will build a \$1.5-million retail center at Raleigh, N. C. The two-level building will cover a city block; it will be ready next fall.

The Toni Co. is the target of an \$8.5-million patent-infringement suit filed by Arnold F. Willat Co., San Rafael, Calif. Willat, producer of beauty-shop permanent-wave equipment, asserts that Toni has infringed on three of its patents in the last six years. So Willat is asking 10¢ royalty on each \$5-million Toni sets sold.

Lower shoe prices are not likely soon. Chairman Irving S. Florsheim of the Florsheim Shoe Co. said that shoe men last year felt leather prices would recede. Instead, prices today are higher than last year. Reason: Hide imports are below normal.

Professional movie equipment made by Pathe Cinema, of Paris, is being distributed in the U. S. exclusively by the recently formed Pathe Cine, New York. Pathe Cinema says it's "the Eastman Kodak of Europe."



YOUR INDUSTRY NEEDS THIS *Complete* SHIPPING SERVICE

Over a century of shipping experience and constant improvement are back of nation-wide RAILWAY EXPRESS, the world's largest coordinated rail-air transportation service. It's your **complete, all-purpose** facility for every size and type of shipment.

When you use RAILWAY EXPRESS, you deal with **one** responsible carrier. **One single charge** covers everything you need for satisfactory shipping. Specify RAILWAY EXPRESS for all your shipping requirements.

Complete Service for a **SINGLE CHARGE** means—

Pick-up and delivery in all cities and principal towns...

Fast, uninterrupted rail or air service...

Automatic valuation coverage up to \$50 or 50¢ per pound...

Two receipts—one to the shipper, the other from the consignee...

and many other advantages it will pay you to investigate.



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before... America
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DUALITE SECOND SHEETS



NEKOOSA-EDWARDS PAPER COMPANY
Port Edwards, Wisconsin

PICTURE REPORT



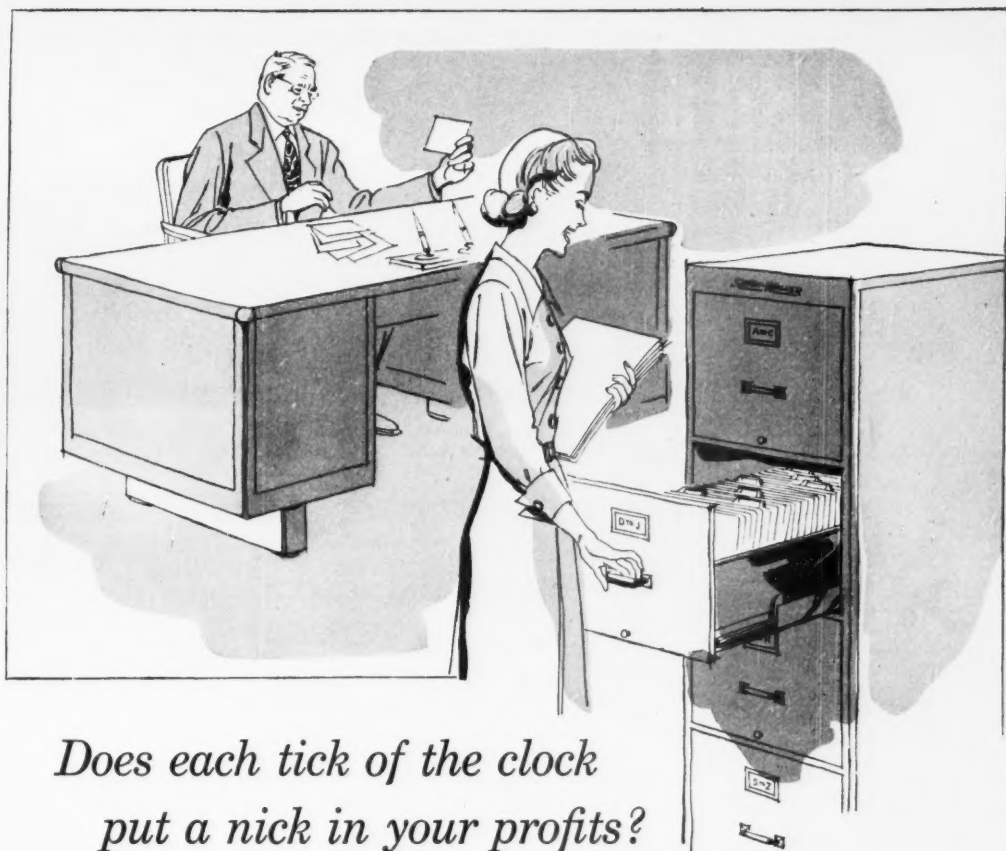
1 First stop for George P. Saladino and his ailing automobile is the service apron in front of Manhattan Pontiac Corp.'s new service and repair station in New York. Harry Baker, the "service inspector" who will shepherd the car through its repairs, greets him.

Smooth Process Sells Auto Repairs

Manhattan Pontiac organizes auto servicing to give customer fast service, direct contact with mechanic who does the work.



2 Diagnosis takes place on a proving stand manufactured by Otis Elevator Co. Besides impressing the customer, this motor-driven machine checks mechanical condition. Dial at upper left tells Baker left rear brake is binding wheel. (CONTINUED ON PAGE 55)



Does each tick of the clock put a nick in your profits?

WITH work hours shortened and office costs higher—every lost minute means lost money!

How often have you had to sacrifice an order—or a customer—because of some record lost or mislaid? And more important—how much costly clerical time is wasted every day because of slow, inadequate files?

The Shaw-Walker label on the cabinet tells you that this office uses "time-engineered" systems and equipment to win its battle over lost records, lost orders, lost time.

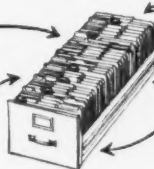
For Shaw-Walker, out of its fifty years' experience, has perfected seven fast and foolproof filing systems. Whether your business needs one file

or a thousand—there's a tailor-made system ready for you.

And there are Shaw-Walker desks, chairs, fireproof cabinets, indexes and other supplies—4,000 different items—each "time-engineered" for the needs of every job and worker.

Finding is fast because records are automatically classified as to importance... top-ranking customers, active correspondents, infrequent.

Mistake-proof guide headings eliminate figuring and guessing.



"Time-engineered" even in its streamlined physical make-up.

Follow-up of letters simple, automatic.

Positive control over all papers out-of-file.

**Write for FREE
BOOKLET**

PACKED WITH IDEAS FOR STRETCHING OFFICE TIME! Organize now for greater sales effort and lower operating cost! A wealth of ideas on "time-engineered" office systems and equipment. 36 pages! Many color illustrations! Just off the press! Write today on business letterhead to: Shaw-Walker, Muskegon 18, Michigan.



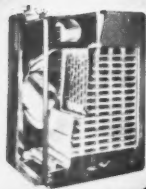
SHAW-WALKER

LARGEST EXCLUSIVE MAKERS OF OFFICE FURNITURE
AND FILING EQUIPMENT IN THE WORLD

EXECUTIVE OFFICES AT MUSKEGON, MICHIGAN
BRANCHES AND DEALERS IN ALL PRINCIPAL CITIES

Leading in MODERN DESIGN

APPEARANCE



CONSTRUCTION

New Janitrol Unit Heaters bring added improvements to features already time-tested and proven

All the new improvements in the new Janitrol Unit Heater are not visible at a casual inspection... but experienced heating men will find in these new units, new evidence that Janitrol equipment is far ahead in the field... in design, construction and performance.

Ask your Janitrol dealer to demonstrate the many advantages of standardizing on Janitrol Unit Heaters for your new building or for modernizing your present place of business. Janitrols heat efficiently with mixed, natural, manufactured or L-P gases.

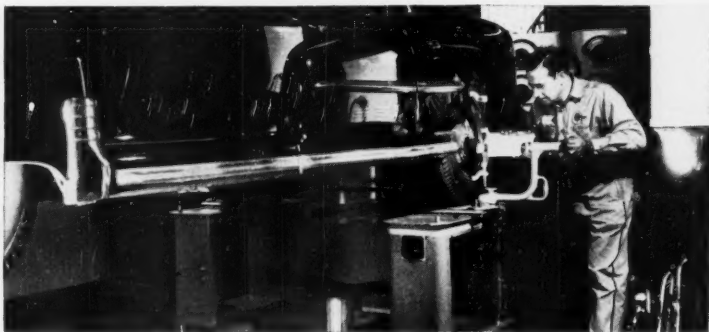
Janitrol
SURFACE COMBUSTION CORPORATION
Toledo, Ohio

Write for new Unit Heater specifications and address of nearest Janitrol representative.

AUTO REPAIR (continued from page 56)



3 Writing up the repair order comes next. Saladino also wants wheel alignment checked, wheels balanced. Manhattan Pontiac's president, Charles Schnurmacher, figures customer-mechanic dealing gives personalized, informative service.



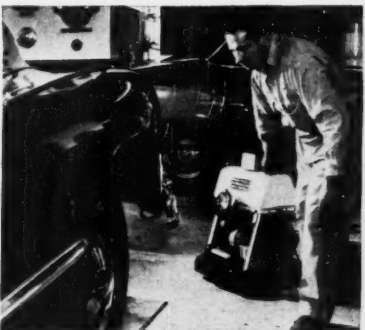
5 Wheel alignment is checked, using Bear Mfg. Co.'s Lift-A-Liner. Manhattan moves automobiles as little as possible, uses portable equipment like this to bring the machines to the car. Moving cars, says Schnurmacher, is a costly, time-consuming operation.



7 Dial test, performed in the presence of Saladino, shows that left rear wheel no longer binds. Car is still where Saladino left it earlier. The system requires skilled mechanics, since one man does all the jobs. Baker can now tell Saladino exactly what was wrong.



4 Left rear wheel comes off after customer has gone on about his business. Baker isolates the trouble, cures it, replaces wheel.



6 Wheel balancing is another job done with portable equipment—this time a Stewart-Warner machine. Car is now ready for retesting.



8 Job done—and bill paid—Saladino bids Baker farewell. Entire job has taken less time than it would have by conventional methods.

REDUCE

DAMAGE

PACKING TIME

HANDLING COST



INCREASE



CUSTOMER GOODWILL



ADVERTISING VALUE



SALABILITY

These advantages are available if you use the facilities of Gaylord's Engineering and Research Department.



Corrugated and Solid Fibre Boxes

Folding Cartons

Kraft Paper and Specialties

Kraft Bags and Sacks

Just call the sales office nearest you

GAYLORD CONTAINER CORPORATION

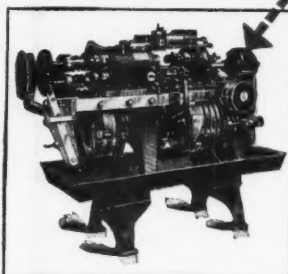
General Offices: SAINT LOUIS, MO.

New York • Chicago • San Francisco • Atlanta • New Orleans • Jersey City
Seattle • Indianapolis • Houston • Los Angeles • Oakland • Minneapolis
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ARE YOU USING 1906 Machines

HITCHCOCK'S MACHINE TOOL LIST, JAN. 1906

"Acme Automatic"



The Wholesale Screw Machine

For quick, accurate work it has no equal. One set of tools only. **Four** bars simultaneously operated upon.

The National-Acme Mfg. Co.

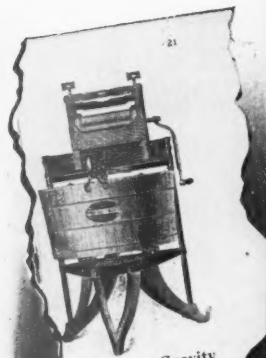
Cleveland, Ohio, U. S. A.

Branch Offices: New York, Boston, Chicago

FOREIGN REPRESENTATIVES:

Alfred H. Schutte

Schuchardt & Schutte

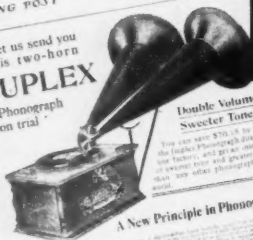


Washing by Gravity



EVENING POST

Let us send you this two-horn
DUPLEX
Phonograph on trial



A New Principle in Phonographs



No. 251. Carriage, Top, Runners. Price complete, \$65.00.
As good as new for \$25.00.

33 Years Selling Direct

Our vehicles and harness have been sold direct from our factory to user for half a century. We ship for examination, approval and guarantee. You are not satisfied as to price, quality and value. We are the largest manufacturer of vehicles in the world. We make the complete line of vehicles for large and small.

Fiskart Carriage & Harness Mfg. Co., Elkhart, Ind.



In 1906, the "Acme Automatic" was a sales leader—the first multiple machine to produce small duplicate parts good enough and fast enough to reduce unit costs on the volume-produced, nationally-advertised products of the day—phonographs, washing machines, automobiles, "electrics", carriages and the like.

The old Acme Automatic is still a good machine—we find an occasional customer using one yet. But it was not designed to produce today's parts, at today's costs for labor and materials.

MODERN ACME-GRIDLEY AUTOMATICS are built in sizes:
Models RA-RB Bar Machine $\frac{9}{16}$ " to $5\frac{1}{8}$ "—4, 6 and 8 Spindles.
Model RPA Chucking Machine $5\frac{1}{4}$ " to 12"—4, 6 and 8 Spindles.

TO MAKE *1949 Models?*

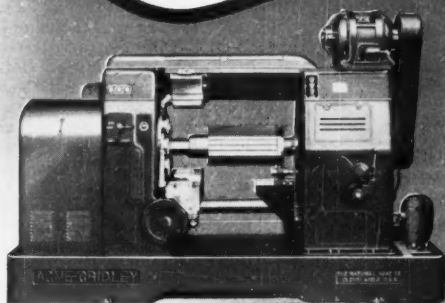
To produce 1949 models—and make a profit—you can't get by with 1906 methods and machines—or even those of 1940!

Any multiple spindle automatic that has not been continuously improved—improved in *strength*, in *precision*, in *adaptability*, in *output*—obsolete. Your competition is using equipment that will outproduce it, cut its production costs—and price you out of the market.

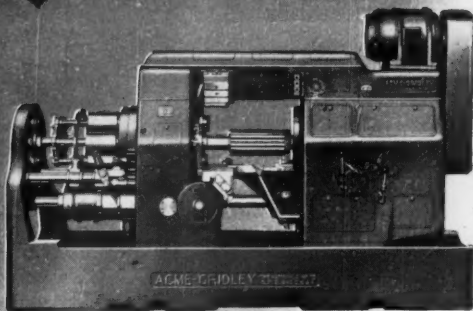
Forty thousand Acme-Gridley Bar and Chucking Automatics have a distinguished record over the years for lowering machining costs, to give you more good pieces in the pan at the end of each day. These time-proved records for production are no casual happenstance. They're based on a continuing policy of strict adher-

ence to basic design requirements—ruggedness of frame, quick-change positive camming and, more recently, wider use of independent power-driven auxiliaries that eliminate many secondary operations.

Today's Acme-Gridley Automatics are built to give you production—as fast as modern tools will take it. With them you can meet and beat 1949 competition. We're prepared to quote them on the basis of guaranteed production figures. If your present machines are not postwar models it will pay you to make the comparison. May we help you?



Acme-Gridley Chuckers have a distinguished record for lowering production costs. Among their many moneysaving features is the wide, open tooling zone, permitting the use of independent power-driven auxiliaries that often eliminate secondary operations. Ask for bulletin CM43.

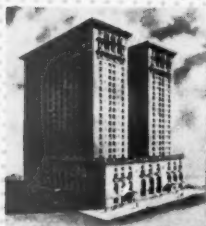


Acme-Gridley Bar Machines are known for their speed, stamina and adaptability. Rugged box-type frame, plus positive, close-coupled, quick-change camming provide a combination built for speed—as fast as modern tools will take. Ask for bulletin M45.

The NATIONAL ACME CO.

170 EAST 131st STREET • CLEVELAND 8, OHIO

Acme-Gridley 4-6 and 8 Spindle Bar and Chucking Automatics • Single Spindle Automatics • Hydraulic Thread Rolling Machines • Automatic Threading Dies and Taps • The Chronolog • Limit Motor Starter and Control Station Switches • Solenoids • Centrifuges • Contract Manufacturing



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The Biltmore is that kind of hotel... your wants are anticipated, your tastes catered to. No matter how much you have to do in New York, you'll find relaxing comfort here. Cheerful, modern rooms and suites, every up-to-the-minute convenience, alert yet unostentatious service—plus easy accessibility to everything—make the Biltmore a hotel you'll enjoy.

John G. Horsman, *Manager*

Illustrated folder sent on request

THE BILTMORE

Madison Ave. at 43rd St.
New York 17

Adjoining Grand Central Terminal

Frank W. Regan, *President*



READERS REPORT:



The Thinker

Sirs:

If this modern design furniture is so doggone comfortable, why is Architect Alexander Girard [BW—Oct. 15 '49, p22] sitting on the floor?

ARTHUR MONTGOMERY

ATLANTA, GA.

• As we understand it, Architect Girard was dreaming up a chair design when we took his picture.

Ford Pension Plan

Sirs:

I have always read your issues with great interest and found the information informative and exact. I have just looked at the U.A.W. Ford Chart [BW—Oct. 15 '49, p114] and can see the figures on the right for \$100 for 30 years of service down to \$50 for 15 years service. But, I am totally at a loss as to where the Social Security figures of \$26 and \$44 come from on the present law and the proposed new law. And the actual new law, H. R. 6000, is still different. For your information, the benefits under the present law, the proposed law, and the actual new law passed by the House for \$100, \$200 and \$300 per month are as follows:

These benefits are figured as base benefits, increased by 1% for each year of coverage under the present and proposed laws, and by 1% under the new law. The base benefits are:

Salary	Old Law	Proposed Law	New Law
\$100	\$25	\$41.25	\$50
200	35	56.25	60
300	40	71.25	70

My understanding of the bargaining agreement was that Ford would make up the difference between the actual Social Security and the \$100 a month after 30 years of service.

This chart would look as if Ford would make up the difference between the lowest level of Social Security and the \$100, and let the worker who earned

TO INCREASE

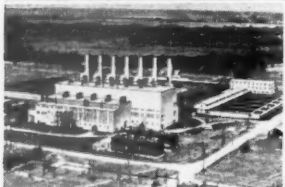
Your Profits



WORLD'S LONGEST MULTIPLE ARCH DAM

▲ HYDRO-ELECTRIC POWER PLANT

▼ STEAM POWER PLANT



Write for Detailed Industrial Survey of Northeastern Oklahoma. This Service is Free!

GRDA offers.....

- Low Cost Hydro-Electric Power firmed up by steam—With high load factor, rate as low as 5.3 mills per KWH.
- Adequate Water Supply — 75 million gallons daily at Cost of Production.
- Process Steam — 220,000 lbs./hr. at 150 lbs. at Cost of Production.
- Labor — Excellent situation for skilled and semi-skilled.
- Sanitation — Fire Protection — Drainage
- Plant Locations

Here in the center of the growing Southwest the GRDA District offers every facility you need to build or relocate your plant, large or small. These Services and Facilities are available on a non-profit basis.

GRAND RIVER DAM AUTHORITY

VINITA, OKLAHOMA

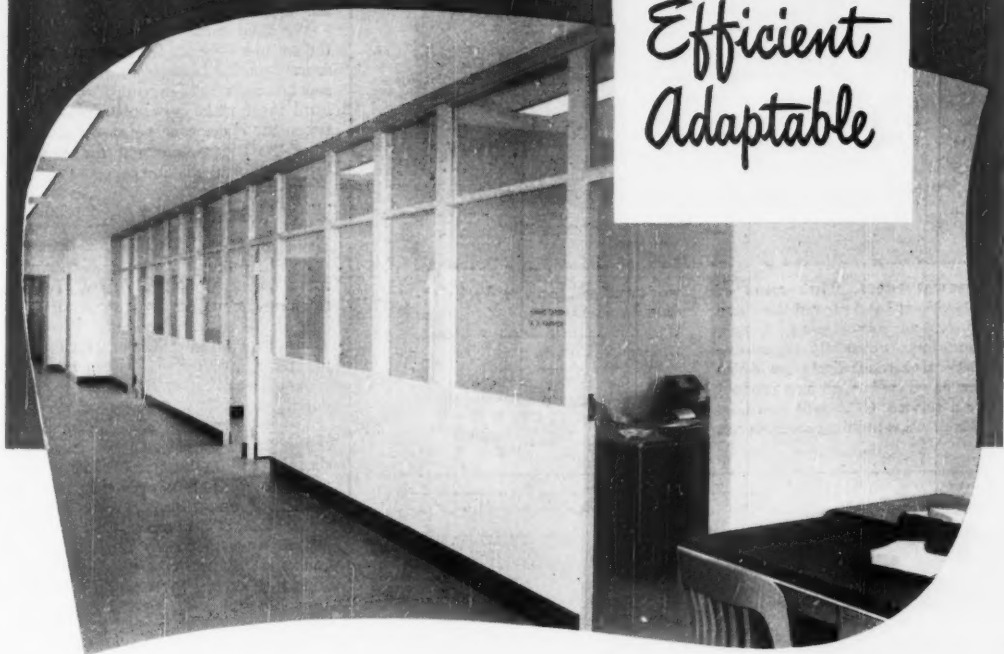
AN AGENCY OF THE STATE OF OKLAHOMA

MILLS

Movable

METAL WALLS . . .

*Distinctive
Efficient
Adaptable*



General Office
Motorists Mutual Insurance Company
Columbus, Ohio



We'll be happy to send
you an easy-to-read 44-
page booklet that will give
you full details. Just ask
for Mills Catalog 49-O.

MILLS MOVABLE METAL WALLS are distinguished by the simple refinement of their architectural design, the permanent solidity of their construction, the pleasing soft colors of their baked-on enamel finishes that keep their fresh new look with no other maintenance than ordinary washing.

Insulated and soundproofed, with surfaces specially treated to eliminate all harsh light reflection, they create beautifully efficient business interiors.

Yet when progress requires changes in office layout, Mills Walls can be moved—quickly, easily, at very low cost—and completely re-used to fit any new space arrangement. An entire change can generally be accomplished overnight without interruption of business routine.

THE MILLS COMPANY
963 WAYSIDE ROAD CLEVELAND 10, OHIO

Sound banks choose sound investments



IMPRESSIVENESS. Thousands of advertisers have proved the value of outdoor advertising. Large, handsome, physically impressive General Outdoor displays will also serve you well in selling a product or a service. GOA tells you how this prestige-building medium can

work and sell for you. Write today General Outdoor Advertising Co., 515 South Loomis Street, Chicago 7, Illinois.

★ Covers 1400 leading cities and towns



more get the additional Social Security.
WILLIAM W. DUNCAN
EQUITABLE LIFE ASSURANCE SOCIETY,
BOSTON, MASS.

• The old age benefit figures we used were average payments. The \$26 figure was the average payment the social security system would dispense next year under the old law; \$44 was the board's estimate of what the average payment would have been if the House bill had become law.

We used these averages rather than the statutory figures for base and maximum benefits because, over all, these averages are what Ford must work with. Ford must make up the difference between the check each pensioner receives from the government and the amount the Ford plan guarantees.

High Markups vs. Low

Sirs:

I was interested in Mr. Lebow's theoretical price list for a pair of Nylon stockings in various types of retail outlets [BW—Oct. 15 '49, p68]. This list serves to dramatize the operating expense ratios of different types of retail stores. The effect of this table is somewhat misleading. It suggests that a grocer who handles a hardware or a drugstore item will price this merchandise by applying his typical markup rate to the cost. This is decidedly not the case. For one thing, grocers are not under competitive pressure to price in this manner. Secondly, they recognize that the cost of handling a "foreign" item may exceed the storewide expense ratio. By the same token, a drugstore does not realize its normal rate of gross margin on fast moving goods like cigarettes.

FRANCIS A. WINGATE
SYRACUSE UNIVERSITY

• It was not our intention to suggest that a grocer who decided to handle a hardware item would necessarily apply either his minimum or his standard markup to the item when he sold it. The point is that different types of retailers have, in general, different markups, and, as a result, are vulnerable to attack from retailers with lower percentage markups. A retailer with a low markup putting in a "foreign" item may give it a markup higher than his usual one—but still use a markup lower than that customary for the item.

No Shoals for Korea

Sirs:

I realize that it is most difficult for an American magazine to obtain reliable facts in regard to a country 10,000 miles away, and particularly about a country as little known as Korea, but I confess I

1 TON • 1/2 TON • 1/4 TON • 300 LB

Sets new records for Low-Cost Maintenance

Yes, records show Keller Air Hoists are economy hoists for day-in and day-out lifting. Built-in durability.

Housing: aluminum alloy casting; steel hooks and chains. Operation requires 40% less air than other hoists of equivalent capacities.

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...LIGHT WEIGHT

One man can carry, hang, and operate the Keller Air Hoist. Variable-speed feature gives positive control in lifting, lowering loads in foundry, shop, and shipping room. 30-lb model lifts 1/2 ton at 17 ft per minute. Send for data, or

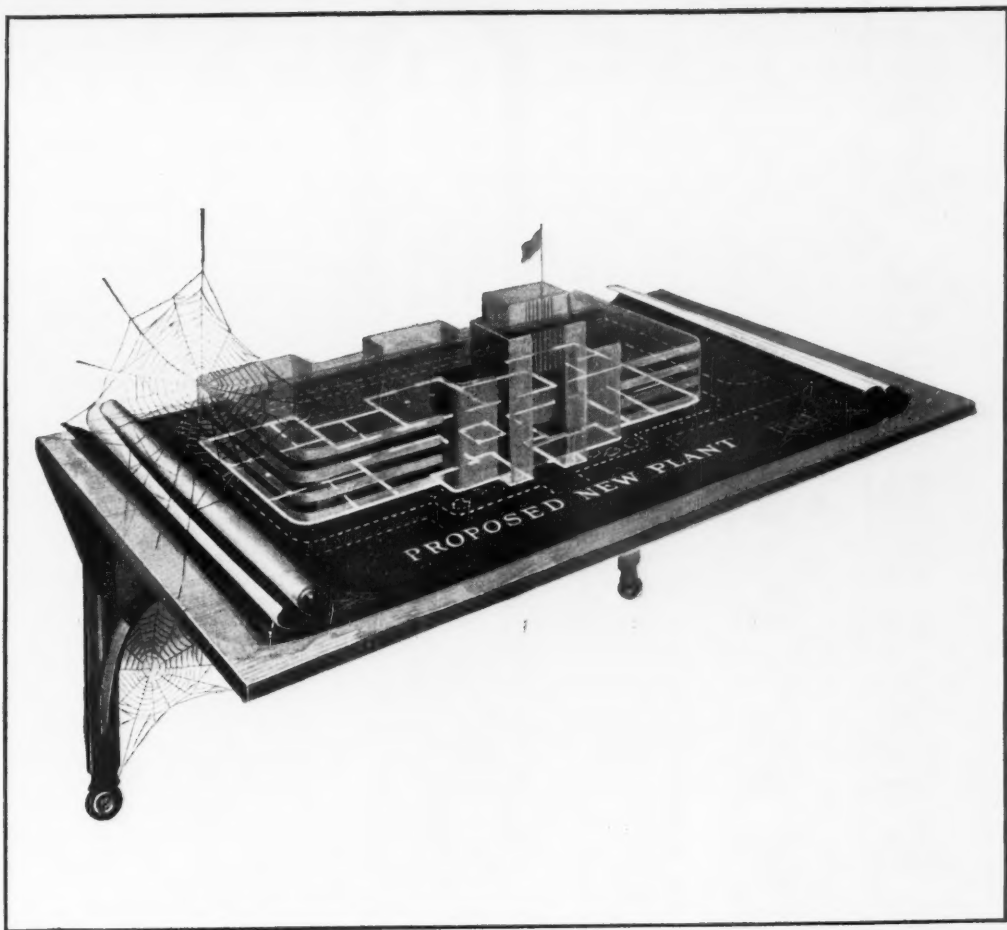
Ask for Demonstration
in Your Own Shop



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KELLER TOOL COMPANY
GRAND HAVEN, MICHIGAN





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YOU may be doing just that...if you shelve those plans for a new factory before you "Look Ahead—Look South."

Along the Southern Railway System, one new industry after another is making the exciting discovery that the future has a silver lining.

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"Look Ahead—Look South!"

Ernest E. Harris
President



SOUTHERN RAILWAY SYSTEM

The Southern Serves the South

How to make one truck



do the work of four



QUESTION:

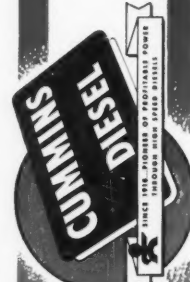


CUMMINS DIESEL POWER . . .

Two years ago a southern paper mill moved pulpwood from timberland to mill with gasoline-powered trucks . . . 40 of them. Then they switched to trucks powered with Cummins Diesel engines . . . and 10 did the job.

And Cummins Power brought three further economies:
MORE THAN \$42,500 IN ANNUAL FUEL SAVINGS
MAINTENANCE CREW REDUCED FROM 52 MEN TO 5 MEN
LESS THAN 1/2 CENT A MILE FOR ENGINE REPAIR PARTS

Cost Conscious?
...CHOOSE
CUMMINS DIESELS



CUMMINS ENGINE COMPANY, INC.
COLUMBUS, INDIANA

Experts: Cummins Diesel Export Corporation • Columbus, Indiana, U.S.A. • Cable: Comdex

was startled when I read the article "Korea Heads for the Shoals" [BW—Sep.17'49,p116]. We have certain engineering and government reports which are not available to you which contain statements at variance with those in your article. I trust you will pardon my taking advantage of those reports.

"Until recently when an ECA financed dam was completed across the Han River near Seoul, Southern Korea got most of its power from a U. S. Navy power barge that found its way into Chemulpo harbor after the war."

First: There is no power dam on the Han River near Seoul. Second: No Navy barge ever found its way into Chemulpo. The barge to which this statement probably meant to refer is the "Electra," an Army barge at Inchon. During the month after its arrival, it produced 3.9% of the power produced in South Korea. During the seven months January-July, it produced 1.43% of the total production. It has never produced as much as 4% of the total power available.

"Irrigation projects are desperately needed, and so are tractors . . ." Just what would one do with tractors in a country in which the average farm is two and one-half acres, and has no petroleum resources and where rice paddies are plowed, harrowed, weeded under water?

"Small deposits of tungsten." One mine at Sangdong is estimated by mining engineers and geologists to contain reserves of 2,750,000 metric tons of ore, containing 1.6% tungsten oxide, and 0.2% bismuth, one of the greatest known deposits in the world."

EDGAR A. J. JOHNSON

DIRECTOR, KOREA DIVISION,
ECONOMIC COOPERATION
ADMINISTRATION

Illegal Arm Rest?

Sirs:

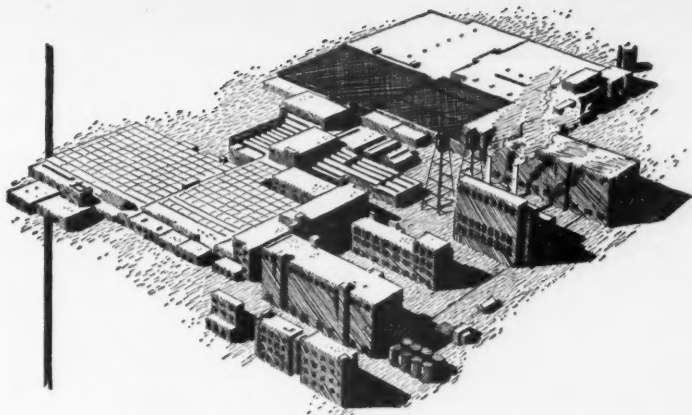
I noticed an article to the effect that the arm rest gadget attached to a telephone was "strictly speaking, illegal" [BW—Oct.1'49,p36]. I would appreciate knowing why an item like this could be considered illegal, and what governing body would make such a decision. If such a device is illegal, how could the Bell Telephone Co. decide to offer a similar, built-in device?

J. DOUGLAS CHIRITE

ELECTRO ENGINEERING & MFG. CO.,
DETROIT, MICHIGAN

• The situation is this: Telephones are the property of the telephone company, and subscribers are not allowed to put any additions or make any mechanical adjustments on the machines—you can't tamper with another's property. Ohio Bell is thinking of building a shoulder rest on their own instruments.

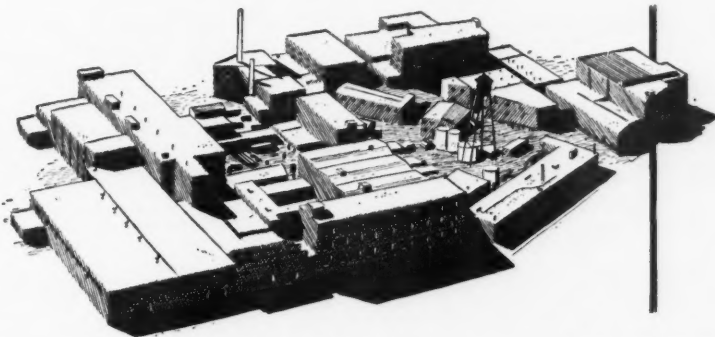
American Viscose Expands 3 Plants in Pennsylvania



American Viscose Corporation has just completed the erection of new buildings at Meadville, Pa., which will increase the plant's acetate yarn capacity, and it is making extensive improvements at its Lewistown and Marcus Hook plants.

HARRY L. DALTON, Vice President of American Viscose Corporation, said: "We naturally take great

pride in the State of Pennsylvania and we feel it is the cradle of the Rayon industry. The first rayon yarn manufacturing plant in the United States was built at Marcus Hook by American Viscose Corporation and began manufacturing operations in 1911. We now have three plants manufacturing rayon yarns in the State of Pennsylvania, and our executive offices have been moved to Philadelphia."

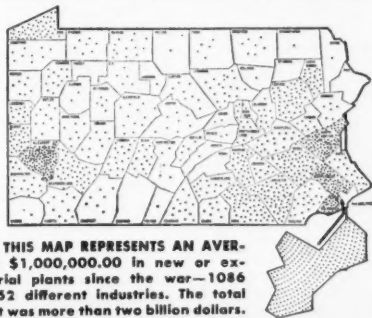


Sloane-Blabon Spends \$3,500,000 on 7 New Buildings in Pennsylvania

Sloane-Blabon, in business 142 years in Pennsylvania, is doubling its capacity through expansion of its plant in Philadelphia and at two other locations.

HOULDER HUDGINS, President of Sloane-Blabon, said: "We have turned out over a quarter of a billion dollars of merchandise at this plant and its predecessors

since 1807. Our factory expansion and modernization in Pennsylvania will enable us to produce more and better floor covering products than ever before. It was natural that we should enlarge our producing facilities in Pennsylvania where, as the country's oldest manufacturers of smooth surface floor coverings, we have moved forward with the State in its march of progress for 142 years."



EACH DOT ON THIS MAP REPRESENTS AN AVERAGE OF OVER \$1,000,000.00 in new or expanded industrial plants since the war—1086 companies in 52 different industries. The total new investment was more than two billion dollars.

Billions of new capital have been poured into productive facilities in Pennsylvania since the war . . . new plants . . . expansions of old ones. The State Department of Commerce would like to tell you about possible sites, markets, raw materials sources, taxes, etc. Write to Harrisburg, Pennsylvania.

COMMONWEALTH OF

Pennsylvania

JAMES H. DUFF
Governor

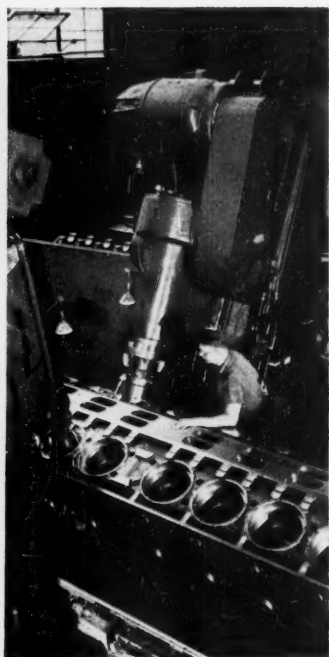
THEODORE ROOSEVELT, III
Secretary of Commerce

PRODUCTION

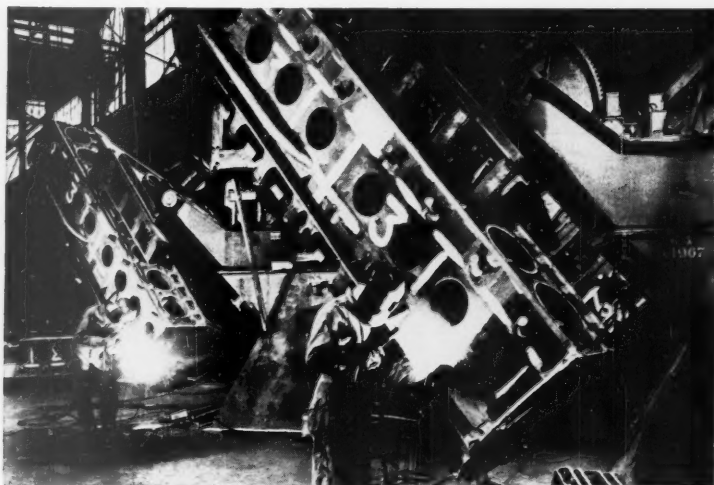
Mass Production of Diesels Comes With



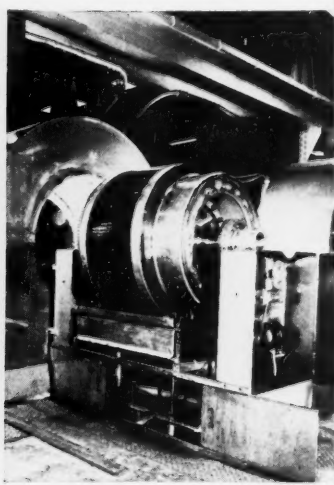
ASSEMBLY Frame of locomotive, complete with engines, generators, and boilers, is lowered by pincer crane onto trucks that carry the traction motors.



BORING Special mill, typical of one-job tools, machines two cylinders



WELDING Mechanical table rotates engine frames so that workmen can always weld "downhand." With piece below him, worker gets cleaner welds, fewer rejects.



BAKING Infrared oven automatically dries out armatures for motors.

Mass Market

G. M.'s Electro-Motive Division uses Detroit techniques to mass-produce diesel-electric locomotives for big rail market.

The Detroit pattern has become the production pattern for diesel-electric locomotives.

• **The Old Gives Way**—The one-job-at-a-time shops of yesterday have given way to plants fitted for long runs of a relatively few standardized models. Interchangeable parts have become stock items; high-speed, special-purpose machines have replaced universal tools. What made this possible is the fact that in the space of 10 years, the railroads have been switching from steam to diesel. The pressure of that change-over produced something no locomotive builder ever had before: a big market for standard units.

In 1939 there were about 500 diesel-electric locomotives in service. This year the number in service, and on order, comes to over 7,000. Diesel's operating advantages have brought about an almost complete switch from steam—at least as far as new buying goes.

• **Change in Thought**—That market has enabled locomotive builders to make radical changes in their production methods (BW—Sep. 11 '48, p. 58). The workings of one plant—Electro-Motive Division of General Motors Corp. at LaGrange, Ill.—shows how close to the techniques of auto-making their new methods have brought them.

In September of this year, E-M turned out 163 locomotives. Two years ago, September production was 82 units. For next year, E-M is geared to an output of 2,000 locomotives, including two new models of streamliners for passenger and freight service, and three new switch engines (pictures, page 70).

• **Cooperation**—One reason the plant has moved so quickly into high output has been the cooperation between its design and production departments. These divisions, in turn, have been closely tied to the marketing end of the business.

Selling the railroads is always a tough proposition. The roads forever demand special modifications of equipment for their lines. For years, steam-locomotive builders suffered under the tradition.

With diesel-electrics, though, the problem wasn't quite so acute. For

NO ICE REQUIRED for Fresh Seafood Shipments

One of the most significant packaging developments in the last decade is the H & D INSULPAK®, a corrugated box in which coast-to-coast airborne shipments of pre-cooled foods are made possible—without refrigeration. INSULPAK now makes all America a vast potential market for seafoods of all kinds. Daily delivery of fresh, perishable foods everywhere is now accomplished by this new, insulated package. It is hoped that it will soon be available for wide-scale distribution.



Good Packaging MAKES GOOD PRODUCTS BETTER

This Shipping Box TELLS and SELLS

Here's the famous Duplex shipping-display box developed by H & D for those manufacturers who wish to display their products—effectively and economically—at point of sale. It's a regular corrugated shipping box which the dealer opens to form a colorful counter display with a sales message that attracts attention and makes people buy. The H & D Duplex shipping-display box protects your product in shipment—sells your product in the retail store.



H & D PREPAK® Increases Unit of Sale

Many items, such as china and glassware, can be prepared at the factory into selling units that step up sales. Instead of selling one item at a time, Prepak sells six, eight or twelve. Prepak promotes "take with" purchases, needs no repacking. The package illustrated contains a set of 8 glasses. It is made of light blue embossed corrugated board, printed in two colors, red and dark blue.



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REG. U. S. PAT. OFF.

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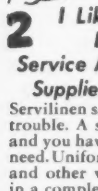
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HANDS OF
THESE 3
BIG LINEN
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No investment is necessary when you use Servilinen—America's finest linen supply service. You get crisp, clean towels, uniforms and other washable cotton items on a low cost rental basis.



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Servilinen saves you time and trouble. A simple phone call and you have the cottons you need. Uniforms, smocks, coats and other washable apparel in a complete range of styles and sizes to fit any type of business. Call your Servilinen supplier today and see how he can serve you.



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Yes, employees work better and are healthier when they have clean sanitary cotton towels and uniforms supplied them. Let Servilinen supply you with these items on a low cost rental basis.

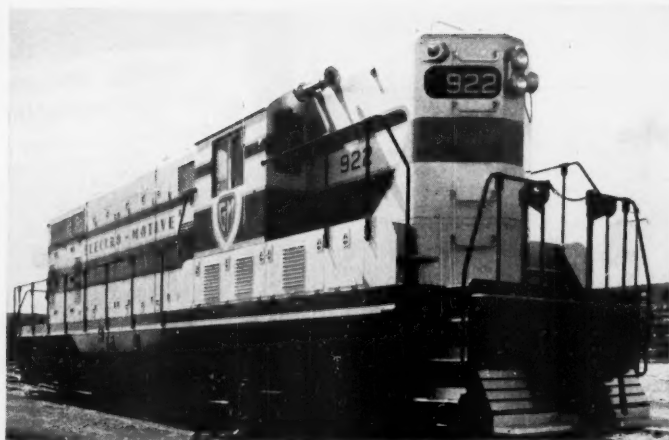
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SWITCHING DIESEL, a new model at E-M, has a 1,500-hp. rating. Parts are interchangeable with freight locomotive. Equipment slides out side doors for maintenance.



PASSENGER DIESEL, also new, produces 2,250 hp. Water tank outside fuel tank cuts down fire hazard from flying rocks. Silicone insulation is used in traction motors.

one thing, the railroads hadn't had time to acquire as many pet ideas about diesel-electric engineering as about steamer design. Then, too, the flexibility of the diesel enabled the builder to meet various road-operating demands without complex changes in basic equipment. If one of the roads wanted a locomotive to haul either freight or passengers, the builder could turn out a double-duty unit by altering the electric control system.

• **Versatility**—Thus, from the start, diesel builders, such as E-M, stressed the versatility of their locomotives. The railroads gradually were talked out of many of their demands for special designs. Diesel builders found they could approach their market in the same way that manufacturers of consumer goods did—with an eye to volume.

At E-M, the volume approach meant

stating out definite production and engineering goals. First of all, C. R. Osborn, general manager of the division, had to find ways to pack more sales appeal—in terms of performance—into his product. Next, he had to shave production costs. The job not only called for a design that could be mass-produced, but also for proper tooling. There had to be maximum interchangeability of parts (there are 70,000 in one locomotive). Further, the plant had to be made self-sufficient, in terms of component supply.

• **Revamping**—Four years ago, E-M's principal plant sprawled over several acres of ground. The flow of materials involved juggling parts back and forth for various finishing operations. Even the forming of heavy sheet for locomotive bodies was done by hammer and die. Coils were wound by hand; weld-



When paint goes on to stay

Make-up that will stay on the face of a high school actor — paint that will last longer and look better on home products and industrial equipment — both require a special paint base.

That's why so many leading manufacturers are turning to Armco Cold-Rolled PAINTGRIP for use in steel products where extra-long life of paint finish is desirable. They know Cold-Rolled PAINTGRIP improves the salability and durability of such products as kitchen cabinets, porch furniture and furnace casings because it has been given a *better paint base* in Armco mills. They have learned from experience

that this mill-Bonderized steel holds paint several times longer than regular sheet steels.

Bright, smooth, cold-rolled steel sheets are "flashed" with zinc before Bonderizing to help protect against rust attack until the product or equipment is painted.

Cold-Rolled PAINTGRIP is only one of many Armco Special-Purpose Steels that enable manufacturers to make improved products that give lasting satisfaction through better performance and longer wear. It's why the purchaser so often asks to see the Armco trademark when buying steel products for home or business.

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FABULOUS MARKETS • In a compact area of 250-mile radius your products can be delivered overnight into 12 states with 46,000,000 people and \$66 billions of net buying income. You'll enjoy sales and distribution with minimum effort and expense... lowering the cost of marketing.

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New Jersey is the hub of the prosperous Atlantic seaboard... focal point of the world's greatest concentration of transport facilities. It has the highest ratio of R. R. tracks per square mile in the U. S. A. . . . to feed you supplies and move your products. You'll share the maritime ports of New York and Philadelphia . . . the world's leading freight airfields . . . the State's network of improved highways . . . to reduce your transportation costs.



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SKILLED LABOR SUPPLY • With its more than 9,000 manufacturing plants, New Jersey stands unchallenged as a reservoir of productive labor with "know-how" reflected in maximum output per wage-dollar . . . resulting in lower production costs.

OPEN TO EXPANSION • More than 400 small towns and 150 urban areas invite you. Although 6th in industrial output, New Jersey has plenty of room. It's 40% farmland; 46% woodland. Vast frontiers for decentralization are yours . . . plus a fair tax policy, co-operative government, and recreational facilities of lakes, mountains and 120 miles of seashore.



NEW YORK



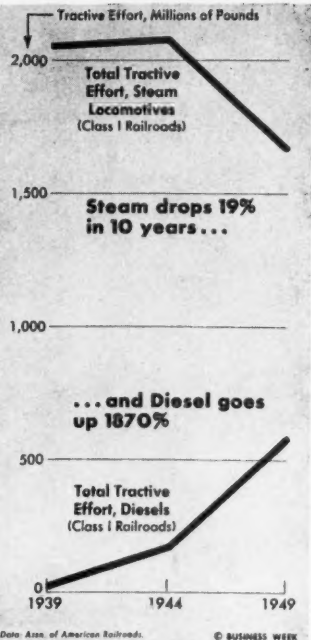
NEW JERSEY

ALFRED E. DRISCOLL, Governor

YOU ARE WELCOME TO ALL THE FACTS

Write for 40-page analysis of New Jersey as a plant location. Contains county-by-county data. Call on the New Jersey Council for any further information or help you desire. Inquiries treated in confidence.

NEW JERSEY COUNCIL
Dept. of Conservation and Economic Development
Box 812, State House, Trenton 7, N. J.



ing operations went on in various parts of the plant. Automatic machines were few and far between.

Today the plant is set up "geographically." One building houses electrical work; a structure next to it is set aside for engines. A third building is used for final assembly. Components, such as motors, engines, and trucks, feed into final assembly on a pre-arranged schedule. This change-over was made without any breaks in production, B. A. Dollens, the assistant general manager, says.

• **Machines**—Since the revamping, the plant has undertaken a machine-development program. Hand operations are constantly studied with the idea that special equipment might possibly speed output and result in better quality. Production operations, such as flame-hardening and brazing, are watched with an eye to designing machinery to handle parts automatically. So far in the remodeling program, 800 new tools have been put in.

• **Materials**—But the emphasis hasn't been entirely on production.

In design engineering, E-M engineers have been able to reduce manufacturing costs and improve product performance. One example has been the design of traction motors (the electric motors that directly drive the wheels). The weak point in a motor is the armature and coil insulation. Made of mica and organic materials, the insulation tends to shrink in service, then loosen, eventually break

This new Burroughs beauty belongs on every office desk!



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Delivered U. S. A. plus applicable taxes*

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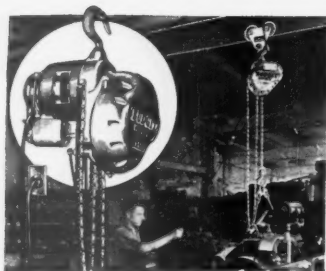
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How save more?

What simpler, easier way could you save money in your plant than by installing 'Budgit' Electric Hoists wherever lifting is an important part of the day's work! There are many such spots in most factories—perhaps in yours—in the production, assembly or inspection lines, in warehouses or on loading platforms.

'Budgits' save from some to many minutes an hour—a vital saving in these days of high wages. They increase production at lower cost. Equally important is their effect on workers who like 'Budgits' because they make the job much easier and guard them from rupture, sprains and torn muscles.

These complete lifting units cost nothing to install. Hang up, plug in and use! Current costs are so small they may be ignored.

Prove the savings 'Budgits' can make for you by installing at least one. The results will convince you.



Made in sizes to lift 250, 500, 1000, 2000 and 4000 lbs. Prices start at \$119. Write for Bulletin No. 391.



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down. A motor's usable life used to be about 600,000 road-miles.

A study of new materials led the engineers into experiments with glass fiber and silicones. With a tape made of woven glass and a binder of silicone fluid, they found higher currents could be handled. Because heat was dissipated faster, the improved insulation increased the rating of the motor from 700 amp. to 835 amp. Braking effort was upped 23%, the locomotive rating 25%. And the new motor had eight times the life of the old model.

Improvements in other materials have stretched the life of such key parts as pistons, piston rings, and bearings. Bearing life used to be about 100,000 mi.; today it is close to 1-million mi.

• **Simpler Parts**—Another engineering change made the control apparatus a lot simpler. That meant less maintenance and smoother operation for the locomotive. Engineering studies to reduce operating costs go on continually. A 15% reduction in fuel cost was obtained with a new oil injector that allowed the railroads to buy a cheaper grade of fuel.

Manufacturing and maintenance costs have been reduced by other design changes. The cooling system, generator, traction-motor blower, and compressor drive of one locomotive used to require 40 antifriction bearings. All the bearings needed regular servicing. By redesigning, E-M cut the number of bearings to 16. Of these, 12 were sealed and needed lubrication only once in five years.

In another instance, six flexible couplings that had to be serviced regularly were replaced by four that needed no attention. About 35 belts were completely eliminated.

• **Production Line**—Along with better designs have come better machines. Special coil-winding machines have cut coil-making costs and have practically eliminated rejects. An electronic inspector scans every inch of insulating tape, noting its dielectric capacity and marking substandard places automatically with a red dot.

Where drying operations are needed between manufacturing steps on coils and armatures, Dollens has installed specially developed infrared ovens. Another improvement is that all welding is "downhand." The welder always works with the piece below him, thus gets faster, better welds, and fewer rejects. To permit completely downhand welding, Dollens' department uses platforms, special jigs and fixtures to turn the work over.

In the engine department, special-purpose automobile-type machine tools are used wherever possible. Dynamic balancing, flame-hardening, sheet-metal forming, bonderizing, paint spraying—

techniques widely exploited by automakers—are all part of E-M's production picture.

• **The Means To Do**—Obviously, a plant revamping that involves special-tool development and relocation of tools without interruption of production is a costly procedure. Not many manufacturers can afford it. But E-M, with its General Motors backing and an assured market, could.

Sonic Pump Stirs Up Oil, But Not High Enough

Ultrasonics is edging into the pump field. Oil-well pumping with a sonic apparatus has been on test in California's Santa Fe Springs and Taft production areas. The tests were shut down last week to permit design changes in the novel equipment.

The pump consists of a set of weights mounted eccentrically on heavy springs. The weights are spun at 300 r.p.m. by an electric motor with V-belt drive set on top of the drill pipe. The apparatus beams soundwaves down the drill pipe at the rate of 10 cycles per sec.

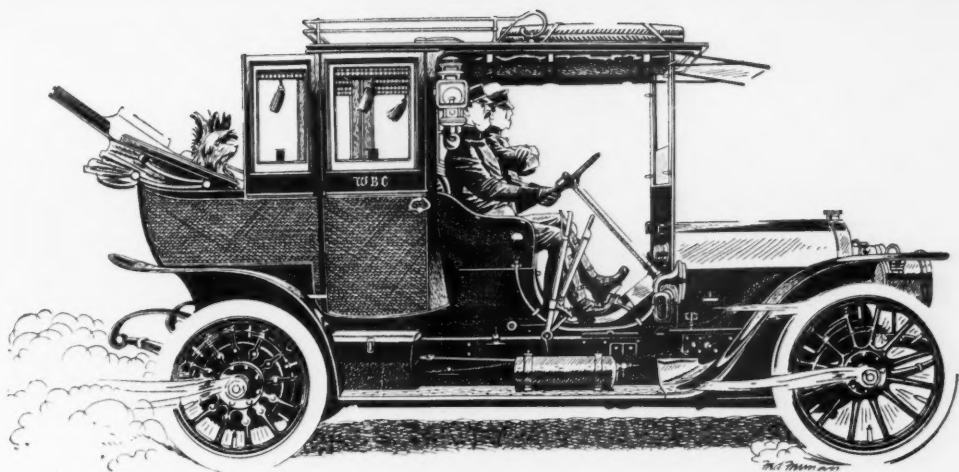
• **Shock Treatment**—Soundwave shocks cause the drill pipe to expand longitudinally in the hole. This has the effect of lengthening the pipe, adding from 1/10 in. to 1/4 in. to the entire length of the pipe. Flapper valves are set in the pipe at each joint. These support the column of fluid as it is jerked upward by the rapid lengthening and shortening of the pipe.

That, at any rate, is the theory on which A. G. Bodine, president of Sounddrive, Inc., Burbank, Calif., built his sonic pump. A subsidiary company, Sounddrive Pump Corp., has been formed to push development and production.

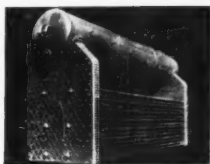
• **Inconclusive**—On tests at three wells of Union Oil Co. of California at Long Beach and Santa Fe Springs, the sonic pump raised water to the surface of the ground. But it was impractical for oil or gas, says Basil Kontzer, chief production engineer for Union Oil. Union removed the pumps and returned them to Bodine, but is still "quite interested."

Standard Oil Co. of California tested one of the pumps in its Taft field. It also notified Bodine that the apparatus failed to work satisfactorily.

• **Still Trying**—Bodine told BUSINESS WEEK that he, too, considered his pumps still in the experimental stage. He is intensifying his developmental work to lick its drawbacks. One of the hazards of the present sonic pump is that it permits the soundwaves to change direction; it is feared that this could cause damage to the drill pipe.



Boilers go out of date too!



As good as new isn't good enough when it comes to boilers. For boilers become obsolescent long before they wear out. And when you consider today's cost of fuel and labor, you'll find that gains in operating efficiency make new steam generating equipment a profitable investment.

Boiler obsolescence, tremendously accelerated in the past twenty-five years, is the result of technological improvements that have resulted in greatly increased efficiency and lower operating costs. Combustion Engineering-Superheater has long been in the forefront of steam generating and fuel burning progress. Combustion experience is yours for the asking in helping to solve today's most difficult problem — the diminishing margin between lower selling prices and high costs. A letter from you will bring an experienced C-E sales engineer to your office.

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The P-A-X is a telephone system that you *own*—not rent. It has only one job—to provide *inside* telephone service—and it does that job to perfection! It frees your city telephone, too, to provide outside telephone service; thus, the two telephones, side by side, team up to give you really *complete* telephone service.

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P·A·X

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TELEPHONE
SYSTEMS**

AUTOMATIC ELECTRIC



PRODUCTION BRIEFS

Hercules Powder Co. will build a pilot plant in Klamath Falls, Ore., to promote study of the chemistry of western woods. Chemicals will be extracted from wood at the plant, sent to laboratories for study.

A **crushing machine** loads 5 tons of ice into refrigerator cars in 90 seconds at Santa Fe Ry.'s Bakersfield (Calif.) yards. The mobile icer straddles box cars on a track of its own, is controlled entirely by push-buttons.

Fiber milk containers are in such demand that American Can Co. will build a new plant in Baltimore. The 150,000-sq. ft. plant will take care of dairies in the eastern and Gulf Coast areas.

Electrical signals of as little as a few billionths of a second duration are put into slow motion on an R.C.A.-developed oscilloscope. Signal patterns are held on a TV-like screen for as long as 60 seconds for study and photographing. Purpose: study of electrical arcs in switch and circuit-breaker operation.

Shorter TV tube will make possible more compact home receivers, says General Electric Co. G.E.'s new wide-angle, metal, 16-in. tube is 5 in. shorter than conventional tubes. Limited production will begin in December.

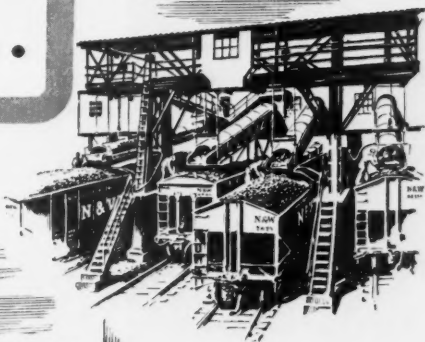
Titanium occurrence, chemistry, and technology are detailed in a comprehensive reference book entitled *Titanium*, just published by New York City's Ronald Press Co. Author: Jelks Barksdale; price: \$10.

Heavy-media separation, used for coal and metal ores (BW—Aug. 20 '49, p. 38), is now being applied to mica-bearing rock at American Cyanamid's Spruce Pine (N. C.) pilot plant. Object: to recover feldspar, quartz, and fine mica, inexpensively and efficiently.

High mining costs—one of the major hurdles in turning out cheap oil from shale (BW—Jun. 11 '49, p. 23)—has been licked, says Bureau of Mines' director James Boyd. He reports that shale is being mined at Rifle (Colo.) at a cost of only about 33¢ a ton.

An 18,000-ton **hydraulic press** for National Tube Co. is being planned by Hydraulic Press Mfg. Co., Mount Gilead, Ohio. The press, believed to be the largest ever designed in the U.S., will form heavy pipe for high-pressure applications.

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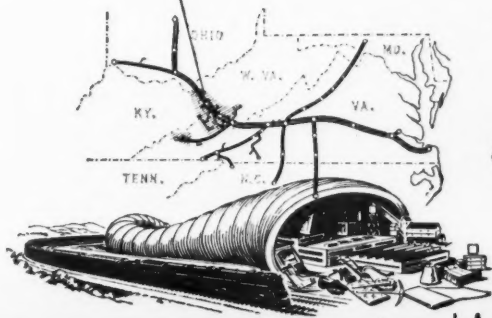
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Write to the Industrial and Agricultural Department, Drawer B-211, Norfolk and Western Railway, Roanoke, Va. The Norfolk and Western's plant location specialists would like to tell you, without obligation and in confidence, what *The Land of Plenty* offers you in plant sites—"next door" to a dependable supply of the world's finest Bituminous Coal!



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Titanium Tanks?

Ordnance is studying the metal's possibilities as armor plating. Lightness, resistance to penetration are big factors.

Titanium may turn up as tank armor one of these days. Army Ordnance is testing the light metal to see how it will take such heavy work.

It is too early yet to tell just how good titanium is as an armor-plating material. But scale tests show that half-inch titanium plate can do as good a job as the best steel-alloy plate—maybe even better. And titanium is only 60% as heavy as steel.

• **Lightness Counts**—Researchers are finding that under some conditions the new metal (BW-Oct. 1 '49, p. 66) is more resistant to penetration than is steel of equal thickness. That's important now, since considerable emphasis is being placed on the development of fast, strong, light tanks that can be carried in airplanes. Since the use of titanium instead of steel would effect a saving of four pounds in every 10, a tank made of the new material could be a whopper, and still be light enough to be air-lifted.

Cost (\$7.50 a lb. for ingot titanium) is still a prohibiting factor. But industry believes that new processes now be-

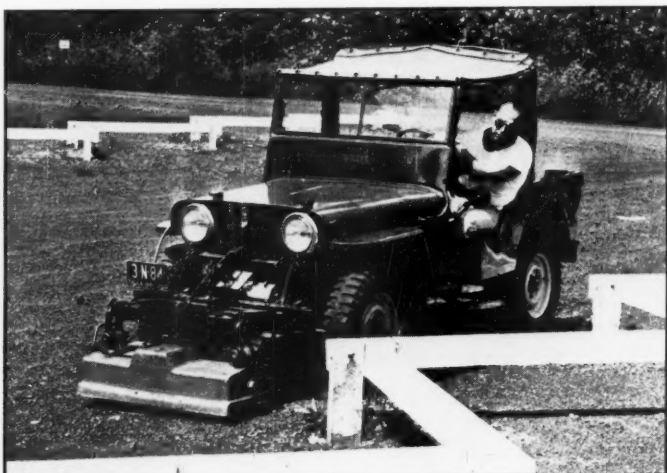
ing worked out will reduce the price materially.

• **Alloying**—Ordnance is concerned mainly with basic research. It is particularly stressing alloy development in which the pure metal is combined with various elements—carbon, nitrogen, molybdenum, vanadium, columbium, tungsten, chromium. Columbia University and the California Institute of Technology are helping in the research work.

Early tests with titanium compounds have shown high hardness: In titanium-carbon or titanium-nitrogen compounds, for instance, hardness of 1,500 (Brinell) or higher have been recorded.

• **Help Wanted**—Ordnance is particularly anxious to have industry tackle one problem: construction methods, including arc welding, forming, and shaping. Early experiments showed that arc welding in helium-atmosphere and argon-atmosphere shielding brought better results than welding in normal atmosphere. This is something on which Ordnance needs help. In charge of the problem is Col. Alden P. Taber, Office of the Chief of Ordnance, the Pentagon, Washington 25, D. C.

The infantry soldier has a particular interest in two ideas that Ordnance is applying, or is thinking of applying, to titanium. One is as a replacement for ferrous metal in crew-served weapons, to lighten their weight. The other is in the construction of light-weight body armor.



Mobile Magnet "Sweeps Up" Truck Lots

With his Jeep Sweep, Stanley W. Smale, Toledo, Ohio, has started a new kind of business. Smale cleans up jagged pieces of metal that puncture tires in parking lots and truck terminals. His Jeep is equipped with

a 1,000-lb. electro-magnet, powered by a 2-kw. generator. The magnet is raised and lowered by a hydraulic lift. On one job alone, the magnet gathered 1,200 lb. of jagged metal and nails from a truck terminal.

FROM THE **S-A** RECORD BOOK



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Another Field

Another Bulk Material

● Moving bulk materials to the right place at the right time and in the right volume is a prime requirement in *any* industry . . . it requires a system designed to

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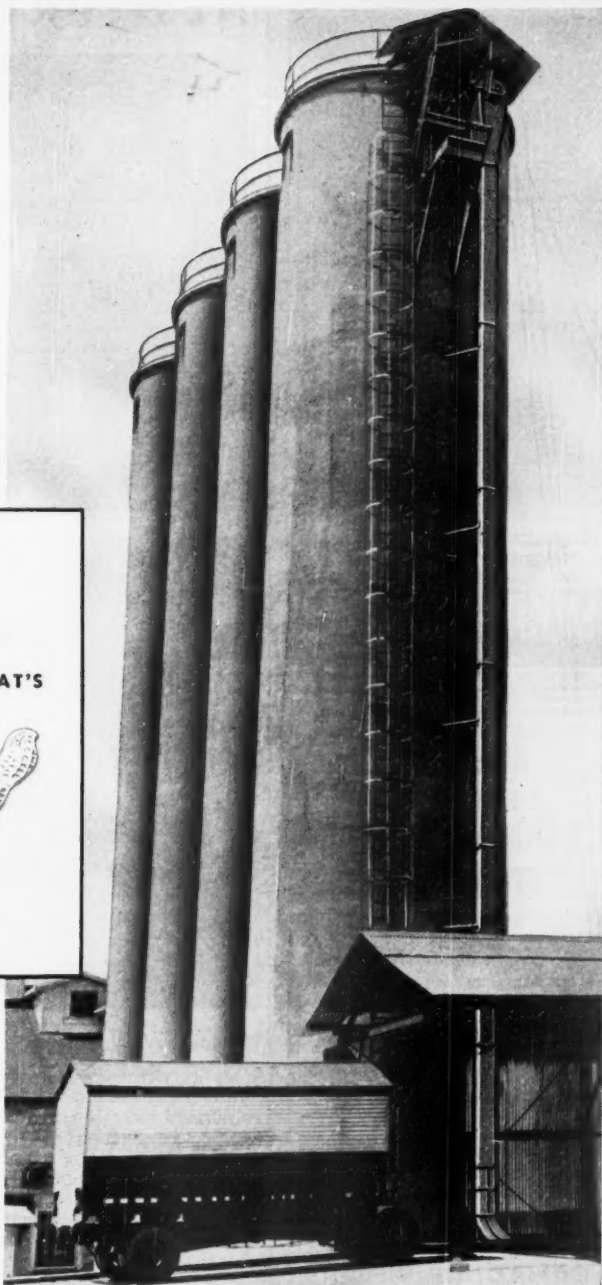
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Stephens-Adamson engineers designed and installed a REDLER handling system to move 22 tons of shelled peanuts per hour to storage without breakage or contamination. Your company may have a similar handling problem . . . or one that's entirely different. The point is, that if your problem involves bulk handling, S-A engineers have the experience and a complete line of equipment to solve it for you.

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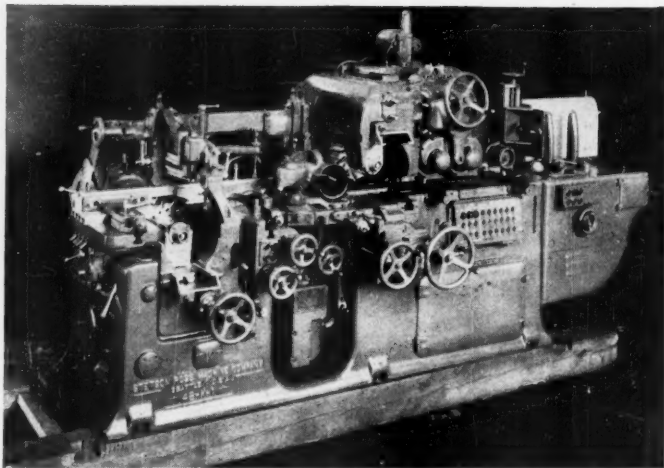
with modern plant and machinery, aggressive personnel, and sound financial resources, is in a position to undertake the production of further sheet metal products, with or without marketing arrangement.

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NEW PRODUCTS



Molding Machine

A quick-change, fast-feed molding machine for use in lumber-molding plants and furniture factories has been developed by Stetson-Ross Machine Co.

The main feature of the machine is its cutting head. Instead of having the usual single cutting blade, it has 12 blades; that results in slower motor speeds and turns out a smoother molding job. The blades are aligned in a grinding room and then installed in the machine as a complete unit.

The cutting head revolves at 3,600 r.p.m. This allows about 300 ft. of molding a minute to be run through the machine.

Two small electric motors adjust the feeding roller and cutting head. The

motors are controlled by push-buttons; this eliminates most manual control of speed and elevation settings. The controls also permit varying the cutting pressure on the stock when feeding becomes difficult.

- Source: Stetson-Ross Machine Co., Seattle 4.
- Availability: two months.

Packaged Truck Body

"Economy" Model 60 is a service-type truck body that's delivered to the customer as a packaged unit. The body is designed for use by utility, contracting, and trade businesses; it mounts on any late-model 1-ton truck chassis.

The body is delivered partially knocked-down, in five welded subassemblies. The sections are accurately pre-drilled, and hardware, such as nuts, bolts, and washers, is supplied. It takes about five man-hours to assemble the body and mount it on a truck chassis. No special skill is required for the assembly job.

Each body section is replaceable in the event of damage due to an accident.

Model 60 has ample compartment space for tools and materials required in service and maintenance work. A body can be equipped with extra optional equipment like overhead ladder racks, electric meter trays, sliding steel roof, and towing hooks.

- Source: Artisan Products, Inc., 3490 West 140th St., Cleveland 11.
- Availability: immediate.

Six-Tool Drill Press

Burgmaster Model B is a drill press that combines six machines into one. A turret head, which replaces the usual

drill chuck, handles up to six cutting tools at once.

Each spindle on the turret can be adjusted to run at some predetermined speed. That way jobs like drilling, boring, tapping, and hollow milling can all be done on the one machine.

As the turret is moved from one spindle to another, the speed of the selected spindle and its index in a vertical direction are selected automatically. Adequate power at the spindle assures fast cutting speeds for each tool.

Less power is consumed, too, since less floor space is required for Model B than for six different machines.

All sliding surfaces on the tool are hand-scraped to assure rigid and shatter-proof operation.

• Source: Burg Tool Mfg. Co., Dept. BW, 3743 Durango Ave., Los Angeles 34.

• Availability: immediate.

Bump-Recorder

Impact-O-Graph is a small-size, self-contained recording device that tells the kind, intensity, and time of bumps or jolts given to goods in transit.

The unit is packed into the crate or carton with the goods to be shipped. For 28 days, the recorder prints conditions of handling in transit on a 60-ft. roll of specially treated paper. Three recording needles, for horizontal, vertical, and longitudinal shocks, do the printing as the paper moves at an inch an hour. If the shipping crate containing the recorder is dropped vertically for several feet the vertical needle will register a high intensity of shock. A small bump on top of the crate will register a slight intensity.

The recording tape is driven by a spring-wound clock that's powered by a small dry-cell battery. The whole works are mounted inside a 9x8x5-in. metal case. When the goods arrive at their destination, the unit is sent back to the shipping point for inspection. Then damage to the goods can be traced to the shipper, carrier, or receiver.

• Source: Cleveland Impact Recorder, Inc., Union Commerce Bldg., Cleveland 14.

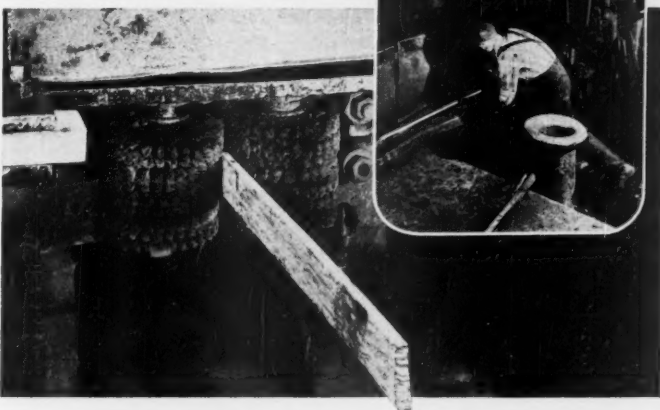
• Availability: immediate.

Office Calculator

Divisumma 14 Calculator has a few new mechanical features that will speed up accounting work in the office.

In multiplication, problems are performed automatically, and the multiplier is printed on the left-hand side of the tape. To do a problem, the operator first puts the multiplicand into the machine. Then the multiplying factor is added by pressing the multiplier keys, starting from the last digit on the right. After the multiplier has been entered,

Another cost-cutting operation with Osborn Power Driven Brushes...



Here's How to clean mill scale from red-hot steel bars at 12 miles* per hour

CLEANING red-hot steel bars of scale at speeds up to 1,000 feet per minute, or approximately 12 miles per hour*, is a real production job—requiring real production tools!

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Here's how it is done... fast, economically, thoroughly. Flat pieces of hot steel come through the mill and are run through a machine of special design against the direction of tough, Osborn Disc-Center Wire Wheel Brushes. The steel has a tem-

perature approximating 1900°F. while it threads through the twin set of rotating brushes.

Simple? Of course. Just a matter of combining ingenuity with the right type of Osborn Power Driven Brushes.

Osborn's 57 years' experience in building better brushes for industry is exemplified in hundreds of production operations... cleaning, roughing, deburring, finishing, polishing. There's a wealth of practical cost reduction ideas that are yours for the asking. An Osborn Sales Engineer will gladly show you why power brushes are today's most modern production tools, without obligation. Write or call—

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the product of the problem is printed automatically by pressing the total key.

Division is performed similarly by registering first the dividend and then the divisor. As each number is entered zeros are added to the number to bring it to the full capacity of the machine. The division is performed automatically by throwing the division lever. As the machine calculates the division, the quotient is printed on the left-hand side of the tape.

If any key is pressed down improperly, the keyboard locks, to prevent the entry of a wrong number.

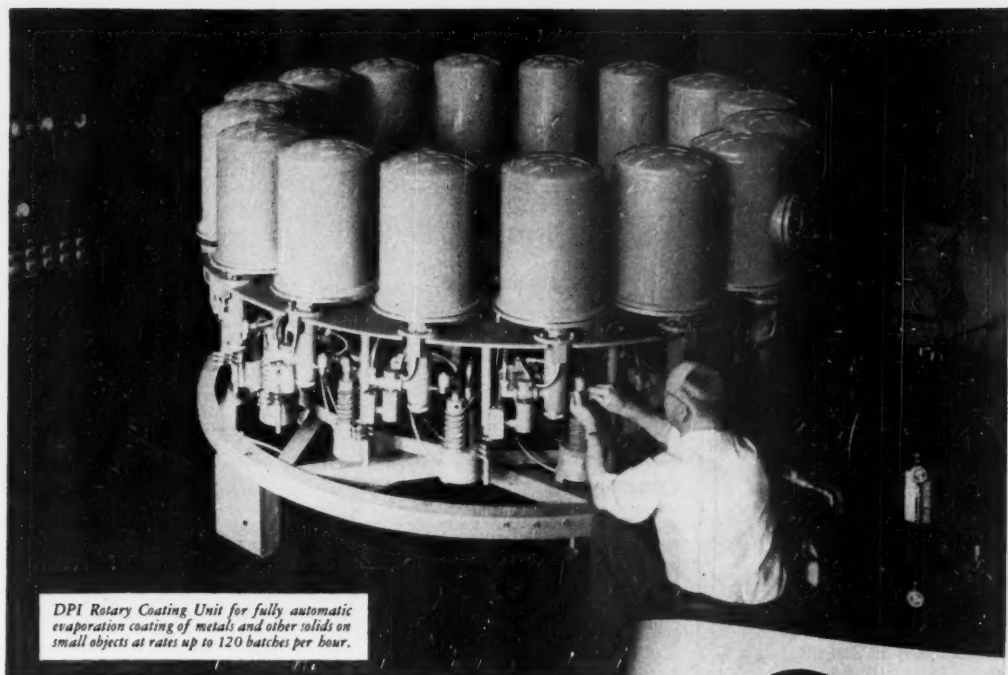
- Source: European-American Trade Development Corp., Olivetti Export Division, 37 Wall St., New York 5.
- Availability: immediate.

P. S.

Installing a Southco Blind Rivet is as simple as driving a tack, according to the manufacturer. A movable pin slides through the center of the rivet proper. The end of the rivet is sliced through at right angles. When hammered flush to the rivet head, the pin presses the sliced rivet sections against the material being riveted. It's a product of South Chester Corp., Finance Bldg., South Penn Square, Philadelphia.

A window shade, called Plastishade, is made of heavy Vinylite plastic. Soap and water will clean it of grease stains, oil spots, and ink. The shade is not affected by heat, cold, or moist weather. It's made by C. W. Breneman Co., 13 Wabash Ave., Pittsburgh 7.

A hand and arm cream for industrial use is designed to protect skin against paints, printing ink, lacquers, oil, and grime. The cream, called Gloy-Cote, is said to guard pores of the skin against dermatitis. The maker is Chase Chemical Co., 2901 Dover Ave., Cleveland 9.



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The vacuum chambers described in this new booklet also have many uses apart from vacuum coating techniques. They are being used for high altitude studies, for electronics, heat treating, powder metallurgy, impregnation of metals, plastics, and textiles. The smaller coater units can also serve the research laboratory for experiments involving high vacuum phenomena.

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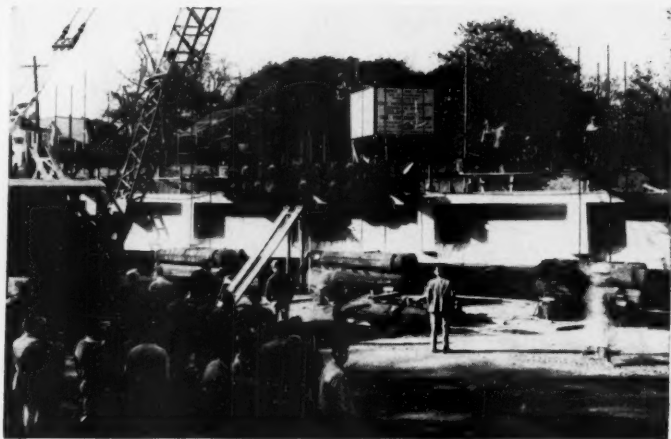
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PICTURE REPORT



EXPERIMENTAL GIRDER of prestressed concrete is loaded with steel ingots during test.



FINALLY CRUSHED under more than 500 tons, girder withstood 11 times designed load.

New Kind of Girder Meets Test

Just after the war Belgian engineers looked around for an inexpensive substitute for scarce steel in rebuilding their country's destroyed bridges. Professor Gustav Magnel, of the University of Ghent, stepped in with the idea of a prestressed concrete girder—a girder poured with a core of steel wires. Trouble with most concrete beams is that, when the beam bends, tension stresses in the underside crack the concrete. In the Belgian design the wires are put under tension before concrete

is poured; they keep the concrete under compression and prevent it from cracking under heavy loads.

Now the prestressed concrete girder has made its American debut and come through with flying colors. Under a license from the Belgian firm which owns the patents, U. S. Preload Corp., New York, let Professor Magnel put on a show (pictures) for U. S. engineers. The girder was a duplicate of those which the company will furnish for a new Philadelphia bridge.



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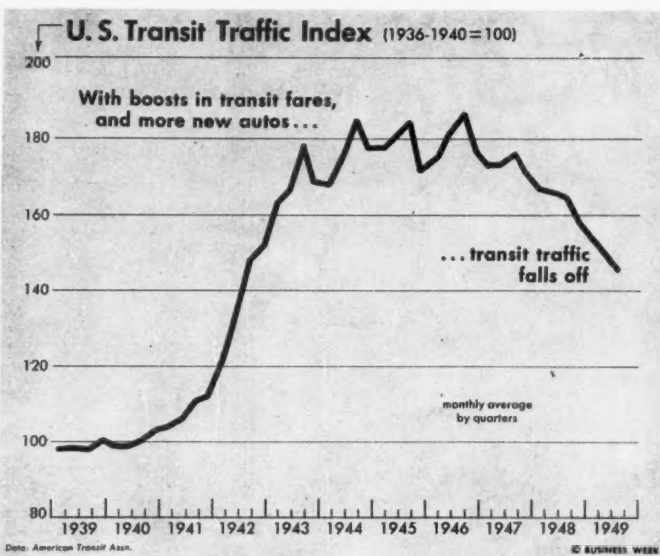
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FINANCE



Transit Lines Ride for a Fall

Operating costs are up; higher fares scare off passengers. In many cities, government has had to take over operation. Proposed solutions: zoned fares, staggered traffic, and lower taxes.

The case of the Birmingham Electric Co. troubled the sleep of more than a few transit executives last week. For the company's struggle to get higher rates is a thumb-nail illustration of the problems of the transit business—an industry that carried over 21-billion intracity and suburban passengers last year.

• **Petition Denied**—Here's what happened in Birmingham: The Birmingham Electric Co., a power company which also provides transit service, filed an application in March, 1948, for a 10¢ fare with free transfers. The new rate would replace the 7¢ fare with 2¢ transfers that the company had used since 1923.

An Alabama lower court rejected the application a few months later. But the company was allowed to collect the higher fares pending an appeal. Riders got receipts for the difference between the old and new fares. The cash involved in the difference was impounded until the case was settled.

Now the Alabama Supreme Court has denied the March, 1948, application on the ground that the evidence then submitted didn't justify the higher

fare. So the company is considering a new application, showing how its operating costs have jumped since early 1948.

• **Mounting Costs**—This story gives you an idea why Wall Street is so little interested these days in transit stocks and bonds. Transit securities had some popularity during the war, when operating income of the industry doubled and tripled over prewar years. But the industry's operating ratio jumped from 81% in 1946—its peak passenger year—to 89% in 1947. During the 1930's, the operating ratio averaged about 79%.

There are two good reasons for the sudden climb in operating costs. The industry's equipment took a good deal of extra wear during the war. Replacement was difficult then and expensive later. Secondly, labor costs have jumped.

• **Poor Show**—Last year, after operating costs and taxes were taken out, the percentage of operating revenue carried through to net operating income was only 3% for the industry as a whole. That is probably the lowest point in 30 years. During the 1930's and the

war period, net operating income averaged about 12%.

The American Transit Assn., which keeps statistics for the industry, doesn't work out net-income figures. Some privately owned transit systems are owned by power companies and it's hard to allocate transit's share of net income. But the magazine *Bus Transportation*, a McGraw-Hill publication, estimates that in the past 10 years the industry has averaged only 2.6% a year on the depreciated value of its physical property. That's the main reason why postwar financing of transit lines has been limited to bank loans to finance new equipment, with the equipment pledged as security.

• **Unwilling Riders**—What has happened to the transit industry? The answer is quite simple. Passengers who haven't shifted to private automobiles aren't willing to pay what it takes to make modern transit systems work properly and yield an adequate return in the face of zooming costs. Yet it's impossible for cities to get along without mass transportation. So local governments often take over.

When rates are raised—as they have been on a wide scale since V-J Day—short-haul passengers prefer to walk a few blocks rather than pay a higher rate. For technical and political reasons, it's hard to work out zone-rate systems, that would allocate costs fairly between long-haul and short-haul riders.

• **The Old Days**—The state of the transit industry today is in sharp contrast with what it was before World War I. In those days, the trolley was one of the glories of the American scene. Most city dwellers used them to get to work or to go shopping. When work was over, you could ride out to the "trolley park" and listen to the band concert, or ride the roller-coaster.

The first successful trolley lines (electric railway cars powered from overhead wires) started back in the 1880's. By 1902, there were 22,000 mi. of electric railway. These lines were mainly trolley lines, but there were several that got power from a third rail.

Millions of dollars were made and lost in the industry by men like Charles T. Yerkes and Thomas Fortune Ryan. Transit stocks and bonds were feverishly traded. Real-estate deals along the new transit lines made and broke hundreds of speculators.

In 1917, the electric railways had 80,000 passenger cars and 45,000 mi. of track. Investment totaled about \$6-billion. You could go from New York State to Wisconsin by electric railway—if you didn't mind a lot of changes. Many interurban trolley lines had parlor cars; several city systems had hearse cars that could be rented for funerals.

• **End of Era**—But by 1917 the electric railway had already passed its peak. Too



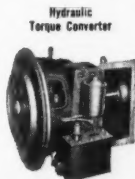
LEONARDO

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The principle of the "fluid drive," modern as it may seem to be, goes back a long, long way. Leonardo da Vinci, an early student of power transmission, conceived the idea of utilizing the smoke and steam created by the cooking process to drive a primitive turbine and cause a spit to revolve automatically.

Leonardo's purpose was commendable...his solution impractical. Today, the principle of hydraulic power transmission continues to intrigue inquiring minds. And the Twin Disc Clutch Company takes pride in providing practical answers to the power transmission problems of leading equipment manufacturers.

Wherever power must be applied...in all types of construction, lumber, petroleum and farm equipment and in the marine and machine tool fields...there is a Twin Disc product that will handle the job. TWIN DISC CLUTCH COMPANY, Racine, Wisconsin (Hydraulic Division, Rockford, Illinois).



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JANUARY 16-19, 1950

Exposition Management: CLAPP & POLIAK
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Recent Transit Earnings

	Biggest War Year		(In thousands)		1947		1948	
	Revenues	Net Income	Revenues	Net Income	Revenues	Net Income	Revenues	Net Income
Baltimore Transit.....	\$25,049	\$1,669	\$22,952	\$696	\$22,498	\$81,965		
Capital Transit.....	28,276	*1,545	27,485	D91	27,486	391		
Dallas Ry. & Terminal.....	6,673	528	7,730	*517	8,744	396		
Lehigh Valley Trans.....	4,293	491	3,815	D35	4,338	78		
Los Angeles Transit.....	22,022	1,218	25,554	957	25,373	1,021		
Louisville Ky.....	6,745	262	6,788	182	7,829	256		
Montreal Tramways.....	23,762	1,352	24,405	841	24,515	D342		
N. Y. C. Omnibus Corp.....	14,409	1,331	16,099	500	16,694	*D1,628		
Omnibus Corp.....	13,744	1,367	15,223	1,246	16,252	244		
Phila. Trans.....	57,191	1,548	62,898	*686	67,261	*362		
Portland Traction.....	9,486	1,180	8,164	470	8,282	342		
Public Serv. Coordinated Trans.	32,344	D358	31,070	D908	33,566	D55		
St. Louis Public Serv.....	26,136	*1,291	25,497	553	27,019	1,044		
Third Ave. Transit.....	21,099	D554	22,806	D3,048	22,993	D4,630		
Twin Cities Rapid Transit.....	15,753	933	16,681	355	18,949	303		

*Before special reserves, charges, tax credits, etc.

D—Deficit.

many miles of line had been built into areas that failed to develop. Too many companies had been launched with watered stock. Costs rose fast during World War I. About one-sixth of the companies in the industry went into receivership or bankruptcy.

One of the major troubles of the trolley lines (and the subways which had by now appeared in a few big cities) was the 5¢ fare. This was a heritage from the earlier horse-car and cable-car lines. The electric lines pushed their service much farther out from the business centers. But it was hard to get fares raised.

• **Enter the Auto**—Another big factor in the decline of the trolley lines was the automobile. Everybody wanted to ride in an auto—even if he had to stand on the running board.

By the early 1920's, the street-car lines were buying buses. From the end of 1922 to the end of 1924, the number of buses owned by the electric railways jumped from 400 to 7,000. Today there are about 60,000 buses operated by transit companies; there are only about 17,000 street-cars, and about 6,000 trolley buses.

• **Higher and Higher**—Although more than half of transit vehicles now roll on rubber tires, the financial problems of the industry are now even tougher than they were in 1917. According to Bus Transportation, in 1939 the annual labor costs per bus averaged \$3,600. By 1948, this cost averaged \$7,500.

The postwar rise in operating ratios could kill the industry. If transit lines can't reverse the trend, they will pass more and more into the hands of local governments, to be partially subsidized by the taxpayer.

• **Solutions**—How can the industry halt the trend? Here are its own answers:

(1) Raise fares, and zone them to put the burden of paying for service where it belongs. It's true that about 80% of U. S. cities of over 25,000 population have had fare increases since the war, but operating costs are still climbing, too. If the technical difficulties of collecting zoned fares can be ironed out, the industry can probably hold on to most of the short-haul passengers it is now losing. One solution: higher-fare express buses.

(2) Stagger working hours for city businesses and industry, and revise traffic patterns. That would speed up transit vehicles, enable companies to cut down on the amount of equipment needed for rush hours.

(3) Lower taxes on transit companies.

FPC and Kentucky Pull Alphonse-Gaston Act

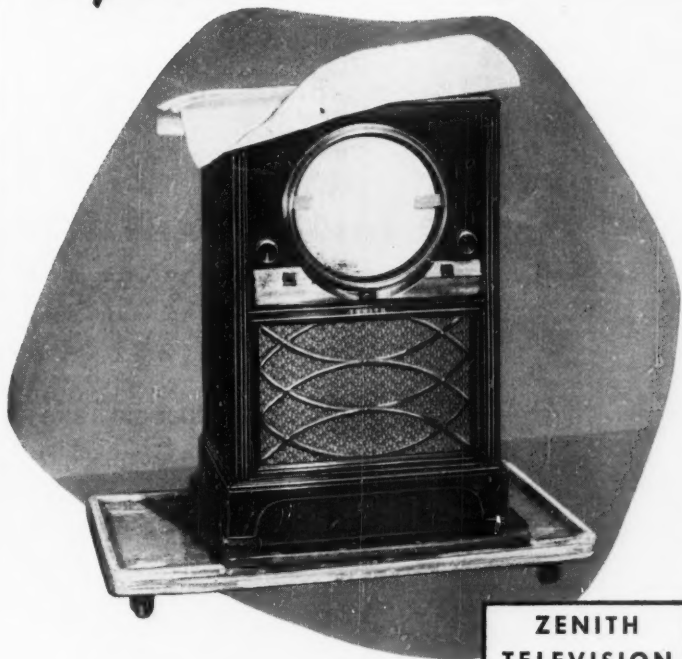
Back before the turn of the century, so the legend goes, Oklahoma had a strange and peculiar law. When two trains approach a crossing simultaneously, it said, both shall stop—and neither shall proceed until the other has passed.

This century has its strange and peculiar quirks, too.

• **FPC and Kentucky**—Take the matter of new security issues of utility companies, for instance. The Federal Power Act says that the Federal Power Commission's authority over utility security issues "shall not extend to a public utility [whose] security issues are regulated by a state commission."

But the law in Kentucky is that the state Public Service Commission's jurisdiction over utility securities "does not apply in any instance... subject to

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1. Sheet of Kraft-backed KIMPAK is laid over top of cabinet and down sides.



2. Corrugated container is pulled down over KIMPAK-protected cabinet finish.



3. Assembly is up-ended, and container closed tightly at bottom over wood base frame protecting legs of cabinet.



4. Completed shipping package now provides full surface protection for the cabinet from container wall contact.

All photographs courtesy of Zenith Radio Corporation, Chicago, Ill.

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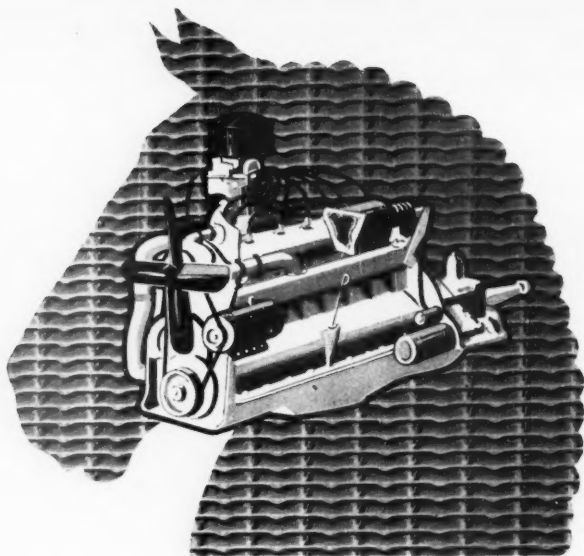
Please send me free, the illustrated KIMPAK packaging guide.

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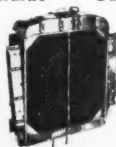
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the supervision or control of the federal government or any agency thereof."

So what was the Kentucky Utilities Co. to do? It wanted to issue (1) 165,000 shares of common stock, to be offered to stockholders and employees; and (2) 25,000 shares of 4½% preferred, \$100 par, to be sold to the public through underwriters. But it didn't know where to go for the official O.K.

• **The Answer**—The company finally solved its problem by ducking it. It applied for permission to both FPC and PSC. The state commission said it thought it had jurisdiction, and O.K.'d the new issues.

And this week FPC settled the issue, once and for all, by gracefully bowing out. It said it thought that what Congress had in mind was "not to provide federal regulation of a security issue where, in the absence of such regulation . . . regulation by a state . . . will be operative."

No Out on Income Taxes For Insurance Companies

U. S. life-insurance companies will soon start paying income taxes again. Last week, a subcommittee of the House Ways & Means Committee announced that it had worked out with insurance executives a new tax formula; under it, the companies would pay \$90-

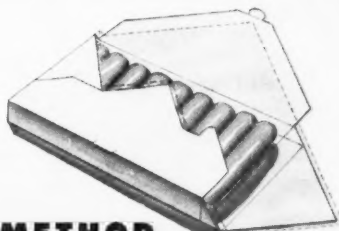
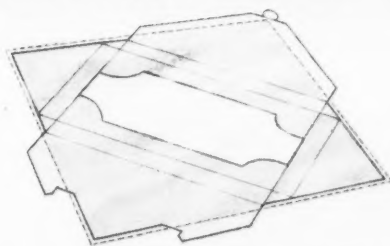


New A.B.A. President

The American Bankers Assn. elected F. Raymond Peterson its president at its 75th annual convention last week in San Francisco. He is board chairman and chief executive of the First National Bank & Trust Co., Paterson, N. J. He joined the Paterson bank in 1936 after years of service as a national bank examiner.

LUMARITH* (ACETATE)

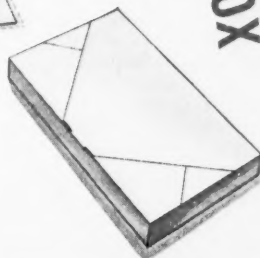
LINED ... FOLDING WINDOW BOX



NEW PACKAGING METHOD

INHIBITS MOLD...

BOOSTS SELF SERVICE SALES



Cel-o-fold Lumarith-lined window box, manufactured by Interstate Folding Box Company, for Cudahy Packing Company.

The Lumarith-lined folding window box is a new idea in self service food packaging. It answers the meat packer's need for a sales-attractive, grease-proof package—that the shopper can handle as safely as a box of corn flakes.

The Lumarith transparent film window is actually a complete liner—the only part of the container that touches the food. Sausage, franks, dried beef, bacon and luncheon meats can be packaged in consumer-unit sizes that make perfect home dispensers—protecting and identifying the contents.

In the self service cabinet, these Lumarith-lined window boxes make appealing displays. Lumarith—the "breathing" wrap—never fogs up . . . is always crisp and crystal clear. The same breathing quality helps retard the formation of mold and slime. This means virtually no returns or replacements.

If you'd like to receive more information about this new packaging method, get in touch with a Celanese representative. Celanese Corporation of America, Transparent Films Dept. 29-K, 180 Madison Avenue, New York 16, N. Y.

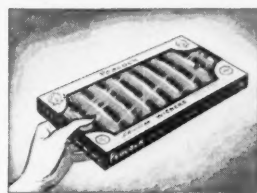
LUMARITH TRANSPARENT FILM

Celanese
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DISPLAYS! Prepared meats become real sales producers when they are displayed in these attractive window boxes.



VISIBILITY! The non-fogging Lumarith window guarantees the shopper a good look at the contents . . . she buys with confidence.



DISPENSER! The handy dispenser container is at home in the refrigerator . . . keeps the brand name before the consumer.

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for hundreds of products, including "Thermobloc" Direct Fired Industrial Heaters

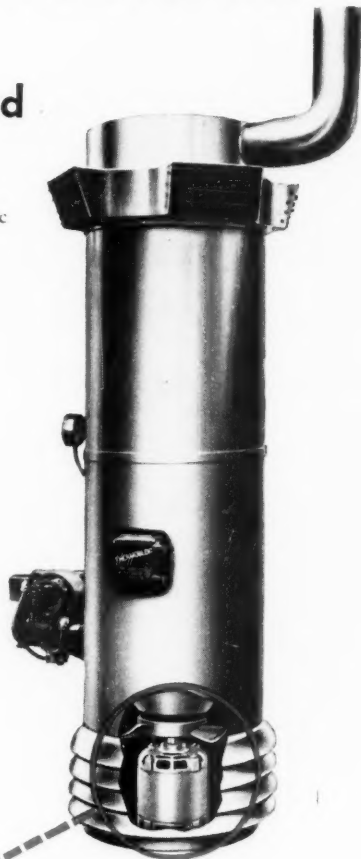
Typical of the many problems A.O. Smith has solved in engineering electric motors to specific product requirements is that encountered in providing blower power for the "Thermobloc," pictured here. Since the diameter of a standard-frame motor would restrict the required air flow of 4000 cu. ft. per minute, A.O. Smith engineered 1 full hp into a special small-diameter design, in a frame of less than standard size, which permits full flow of air into the heater.

The research and engineering staff at A. O. Smith, where research itself has long been "big business," is at your service to help integrate motor design with your product design.

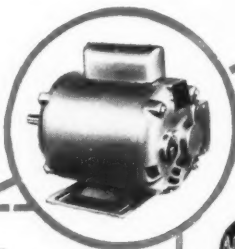
If you are seeking improved performance in your product, or if you require special characteristics in your power component—in either standard or custom-built electric motors—consult the A.O. Smith sales engineer. Or send the coupon below for additional information.

THERMOBLOC, product of Thermobloc Division, Prat-Daniel Corp., East Port Chester, Conn., is a compact, draft-free, direct-fired unit heater for high-efficiency space heating. This compact unit, 10 ft. x 30 in., operates with No. 3 fuel oil or gas at 80 to 85% efficiency, delivering 550,000 BTU per hour. Heat throw covers 5000 to 6500 sq. ft. floor space without ducts.

A. O. SMITH ELECTRIC MOTOR for the "Thermobloc," to drive the large blower fan, is 1 hp, 1800 rpm, single phase, mounted vertically in the base of the unit. Pre-lubricated, sealed-type ball bearings are self-protected from dirt and dust. Light and compact, this motor provides 1 hp in a smaller than standard frame.



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million on their income for 1947 through 1949.

• **Old Formula**—Life-insurance companies have paid no income tax for this period because of the unexpected results of a method Congress devised in 1942 to tax them. Under the 1942 plan, income necessary to maintain policy reserves was tax-exempt, since it was not actually free income. Each year, the Treasury has calculated the formula to establish how much income should be taxed. In 1942, the taxable amount came to about 8% of the life-insurance companies' income. All companies are taxed alike.

But as investment yields declined, the companies had less and less income left over after providing for policy reserves. In 1947, all their income was exempt, and has been since. Secretary of the Treasury John Snyder has been upset about this (BW—Feb. 26 '49, p. 102).

• **New Formula**—The new formula makes it practically impossible for all income of the life-insurance companies to be tax-free. For the years 1947 through 1949 it works out so as to exempt about 95%.

FINANCE BRIEFS

Trading volume on the New York Stock Exchange soared to 28.9-million shares last month. That's the highest October level since 1946, the best monthly total since June, 1948. Bond trading, however, slumped to its lowest October level since 1913.

• **Class 1 railroads** earned only \$38.5-million net in September, as against 1948's \$83-million. Worse yet, many leading carriers will probably report net deficits in October.

• **Tax load of electric utilities** is rising faster than gross revenues. This year their tax bill is expected to be some \$900-million—about 20% of gross. It came to 18% of all revenues in 1948.

• **31% of bank savings accounts** are now invested in real estate loans, 94% of savings-and-loan-association share accounts, about 24% of all life-insurance-company assets. That's the current estimate of the American Bankers Assn.

• **R. H. Macy & Co.** has sold its San Francisco store facilities to Yale University, leased the property back for a long-term period. Reported sales price: \$4.5-million.

• **Residential utility bills** are now being taxed by Schenectady, N. Y. Rate: 3%. Estimated annual yield: \$135,000.

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Continental Baking Co.
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& Rubber Co.
Ford Motor Co.
General Electric Co.
General Motors
Ginseng
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La Guardia Airport
Monasio Chemical Co.
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skilled technicians can render.

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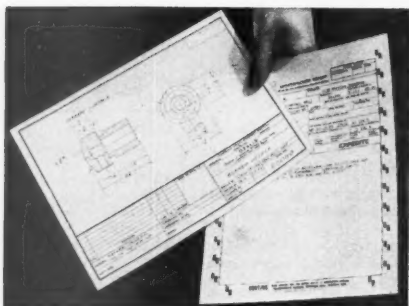
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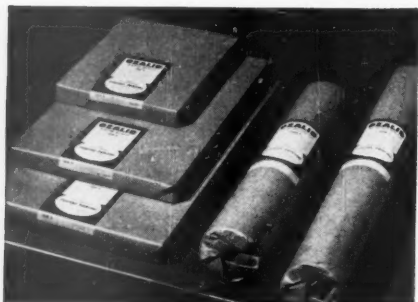
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Young Enigma

Alleghany Corp. cuts rail holdings drastically. Wall St. wonders how Young will keep control of the C.&O.

Those earlier Wall Street stories (BW—Nov. 23 '46, p80) indicating that Robert R. Young's Alleghany Corp. had grown tired of railroading and might be seeking different operating pastures haven't turned out to be pipe dreams.

• **Pulling Up Stake**—Alleghany is now busy at work slashing its once heavy stake in the railroad industry. And it's doubtful that rail issues now account for much over 20% of the market value of its investment portfolio. At the close of 1948, they came to 64%.

Alleghany's rail-disposal program has apparently not yet run its course. Last week, the company was still divesting itself of large blocks of its once most-favored holding: Chesapeake & Ohio common. Moreover, it was learned, Alleghany had disposed of the last of its once very substantial holdings of Chicago, Rock Island & Pacific issues.

• **What Next?**—What is going to take the place of the railroad industry, Young's first love? That has Wall Street (grown very Young conscious over the last decade) wondering.

• **C.&O. Control**—But there's something else the Street would like to know still more: How long can Young continue his ironbound control over the C.&O. system? For last week's selling cut Alleghany's interest in C.&O. common to less than 2.6% of the issue.

Alleghany officials say the corporation means to keep C.&O. control. But C.&O. stockholders may have other ideas. Here's why:

• **Discontent**—The coal strike and, earlier than that, the sharp drop in traffic (BW—Oct. 22 '49, p79) make it quite likely that C.&O.'s earnings won't cover the \$3 annual common dividend it has been paying. The next quarterly dividend may have to be cut, or suspended.

Then stockholders may give more heed to some ancient gripes over Young's C.&O. management (BW—Apr. 10 '48, p95). Young's critics have charged that his various activities have hurt C.&O. earnings (hauling coal is the C.&O.'s basic business). Specific targets of these critics have been Young's ventures into the passenger field and the hotel business; also his endeavors to become a dominant figure in the management of New York Central. Thanks to the latter, C.&O. had to pay Alleghany almost \$7.6-million for New York Central shares that are now worth only some \$4.2-million.

MORE OUTPUT

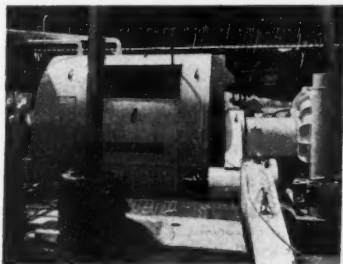
...YARDS, TONS OR MILES

with Torrington Spherical Roller Bearings

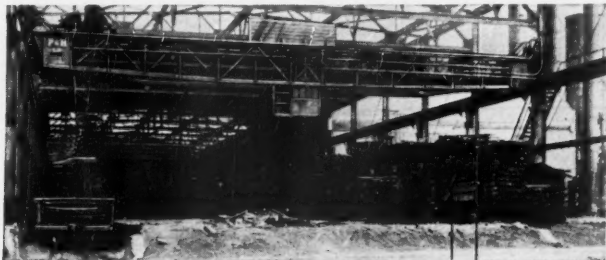


Koehring Company power shovels move the earth—with high yardage output assured by Spherical Roller Bearings.

Harnischfeger Corporation equips its overhead cranes with Spherical Roller Bearings for reliability and efficiency in moving tonnage rapidly and continuously.



Bethlehem Supply Company, too, relies on Spherical Roller Bearings to stand grueling service in deep drilling rigs boring 3 miles into the earth's crust.



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THE MARKETS



Capital and consumer shares ride up together. It could mean the Street is ...

Feeling Good About 1950

The market is not expecting an all-out boom, otherwise capital goods shares would be zooming faster; but it is counting on steady business. Official bull-bear signals still lacking.

Wall Street seems to be all wrapped up these days in the business of trying to see into the future. Near-term news scarcely causes a ripple in stock prices.

• **Decision**—In a single day this week, the stock market had three big new developments to appraise—the unexpectedly generous General Motors dividend, the Democratic election victories, and the sudden break in the coal strike. Ordinarily, you could expect any one of these news items to start a rush of trading. But the market scarcely noticed them.

What this means is that traders had pretty well discounted the news ahead of time. Wall Street has confidently expected a big payout from the automobile manufacturers this year. It has assumed all along that the coal strike would end before it did any real damage to general business. And since November, 1948, it hasn't nursed any illusions about the voting strength of the Republican party.

• **What About '50?**—What the market wants to know now is just how business will shape up in the first part of 1950. For the moment, it is assuming tentatively—very tentatively—that we will have good business, but something short of an all-out boom.

You can see a reflection of this assumption if you take a look at the way capital goods shares and consumer goods shares have been behaving since the start of this year.

• **Capital vs. Consumer Shares**—When the market was going down last spring, the stocks of the companies that make capital goods were by far the hardest hit. Shares in the consumer goods companies got off comparatively easy;

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial	158.5	159.2	156.2	148.0
Railroad	39.8	39.1	40.3	43.3
Utility	79.9	79.4	79.5	67.3
Bonds				
Industrial	99.9	100.0	99.7	94.5
Railroad	80.8	81.6	82.2	85.1
Utility	99.4	99.3	99.0	93.5

Data: Standard & Poor's Corp.

that reflected the general fear of a major business recession.

Since the market rally started last summer, capital goods and consumer goods shares have both gained about 20%. Capital goods have risen a shade faster, but not enough to be significant.

• **Omen?**—This adds up to a somewhat guarded prediction of good business in 1950. If the market were counting on a roaring boom, it should be giving the capital goods shares more

of a ride. As things stand, traders apparently have decided that the capital goods industries and consumer goods industries have shaken down to a rough balance.

From a technician's standpoint, the big question this week still is whether or not the Dow-Jones industrial average will be able to get through its old top of 193.16. It muffed the first chance last week. This week, it has been rocking along just under its 1949 high.

Corporate Bonds Continue to Rise—But

Corporate bond prices, like the market valuation of stocks generally, have lately been moving toward higher levels. But don't get the idea that any spectacular bull market move has been underway. It hasn't.

Actually, capital-safety still seems to be the main goal of bond buyers generally. So investment-grade issues have continued to show the best price tone. And relatively little of their persistent price strength

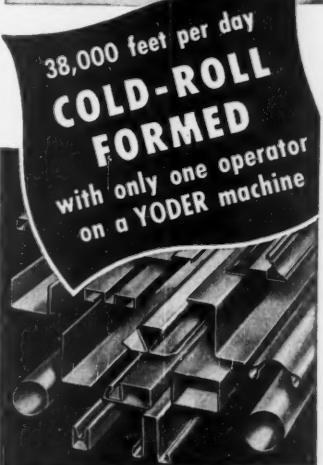
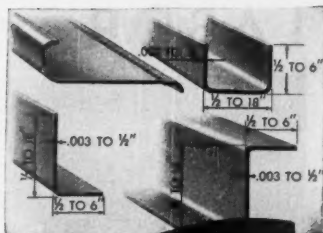
has spilled over into other sections of the bond list—so far.

Despite this, however, a good number of the so-called "good-grade" bonds have recently been doing quite well. Various issues in those categories have recently managed to chalk up pretty fair price performances, as indicated in the tabulation below. Few even of the lower-grade issues have failed to move a point or two higher in recent weeks.

(All Prices Are Given in Per Cent of Par)

Moody Rating		Offering Price and Year Sold	1946-49 Range High	Low	Recent Price	% of Max. Loss Recovered
AA	Amer. Tel. & Tel. 2½s, 1986,....	100.85 (1940)	100.37	85.00	96.50	74.8%
AAA	Atch. Top. & S. Fe 4s, 1995,....	*	141.00	115.25	126.62	44.2
BA	Balto. & Ohio 4s, 1975,....	*	107.50	79.00	86.75	27.2
A	Bethlehem Steel 3s, 1979,....	100.50 (1949)	104.25	101.00	104.00	92.3
AAA	Boston Edison 2½s, 1970,....	*	108.75	98.12	103.50	50.6
A	Chi., Burl. & Quincy 2½s, 1970,....	100.80 (1945)	103.37	90.25	99.75	72.4
AAA	Cincinnati G. & E. 2½s, 1975,....	101.00 (1945)	107.87	96.75	103.00	56.2
BAA	Crucible Steel 3½s, 1960,....	100.00 (1946)	101.87	88.50	94.00	41.1
A	Dow Chemical 2.35s, 1961,....	100.00 (1946)	101.12	94.50	100.50	90.6
B	Erie Income 4½s, 2015,....	*	103.25	57.00	63.00	13.0
A	B. F. Goodrich 2½s, 1965,....	100.50 (1945)	105.87	97.50	102.75	62.7
A	Great Northern 2½s, 1982,....	101.14 (1946)	100.62	82.50	92.00	52.4
B	Gulf, Mobile & Ohio Income 5s, 2015,....	*	104.25	60.00	69.00	20.3
BAA	Lehigh Coal & Nav. 3½s, 1970,....	100.00 (1945)	108.00	90.00	93.25	18.1
AA	May Dept. Stores 2½s, 1972,....	101.00 (1947)	100.25	94.50	100.00	95.7
B	N. Y. Central 4½s, 2013,....	*	98.25	52.00	56.50	9.5
AAA	Norfolk & Western 4s, 1996,....	*	143.00	126.50	130.00	21.2
BA	Northern Pacific 4½s, 2047,....	*	110.00	72.50	81.00	22.7
AA	Pacific G. & E. 3s, 1971,....	*	110.50	98.50	105.12	55.2
BAA	Penna. R. R. 4½s, 1984,....	*	135.50	84.50	85.75	2.5
AA	Shell Union Oil 2½s, 1971,....	101.50 (1946)	101.50	91.00	99.00	76.2
BAA	Southern Pacific 2½s, 1986,....	101.50 (1946)	102.25	80.00	87.50	33.7
AAA	Standard Oil (N. J.) 2½s, 1971,....	98.00 (1946)	99.75	91.50	97.37	71.2
A	Swift & Co. 2½s, 1972,....	100.50 (1947)	103.75	95.25	100.12	57.3
BAA	U. S. Rubber 2½s, 1976,....	100.50 (1946)	101.50	90.00	96.00	52.2
AAA	Union Pacific 2½s, 1991,....	102.19 (1946)	99.62	84.12	95.00	70.2
BAA	Universal Pictures 3½s, 1959,....	*	104.25	75.00	88.12	44.9
AA	Virginian Ry. 3s, 1995,....	106.00 (1945)	113.00	92.12	100.50	40.1
BA	Walworth Co. 3½s, 1976,....	103.00 (1946)	107.25	85.00	86.00	4.5
AA	Westinghouse Elec. 2½s, 1971,....	100.50 (1946)	103.00	96.37	101.75	81.1
BAA	Wheeling Steel 3½s, 1970,....	103.00 (1945)	108.00	93.50	99.00	37.9
Dow-Jones Higher-Grade Rail Bond Average,....						
			119.72	100.55	103.73	16.6
Dow-Jones Second-Grade Rail Bond Average,....						
			103.04	81.98	85.84	18.3
Dow-Jones Utility Bond Average,....						
			110.30	100.87	105.66	50.8
Dow-Jones Industrial Bond Average,....						
			106.58	99.34	102.86	48.6

* Outstanding prior to 1945.



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LABOR



C.I.O. Convention Starts Labor Battle

Split with Communist unions means trouble for industry—about three years of tough, dirty fighting for control of workers.

Last week, at the C.I.O. convention in Cleveland, the alliance between native trade unionism and Communist-dominated labor organizations was broken.

Where that has happened elsewhere in the world, it has meant civil strife and bloodshed. A geographic remoteness from Russian frontiers will save America much of that. But serious trouble in American industry is inevitable.

In 1946, the backlash from the greatest war in history cost American production over 111-million man-days of labor. That was the immediate postwar strike toll. It was this country's price for readjustment. In other nations the price was greater: Governments fell, traditions yielded, and power passed into new hands.

• **Turmoil**—Now it becomes evident that the losses of 1946 were only a down payment. Next year—1950—will see embroiling turmoil on the labor front—a delayed reaction to the war's end and new international tension. Indeed, it may bring home to the labor-

relations departments of many companies in an acutely uncomfortable way, a fact which their engineering departments already suspect: that the postwar period has ended and a prewar period has begun.

What some employers will have to deal with in their own plants is a microcosm of the battleground on which left- and right-wing forces contend everywhere for control of workers. Outside plant gates in Schenectady and Lynn, in the warehouses and factory lofts of Brooklyn and Newark, in the mill districts of Winston-Salem and Philadelphia, on the river-fronts of New Orleans and St. Louis, and on the docks of San Francisco and Port Angeles—in these and scores of other places the Communists will fight desperately to hold their power.

I. Eleven Battlegrounds

At first, Communist leadership will be too busy defending its own position against C.I.O. onslaughts to undertake offensive counter-measures. Almost

surely, later, the leftists will carry the battle into the opposition camp. Eleven industrial jurisdictions held now by Communist-oriented unions are the places where the fireworks will begin. These are:

United Electrical, Radio, and Machine Workers, spreadeagling electrical manufacturing and dealing with General Electric, Westinghouse, General Motors, RCA, Sylvania, Philco, and other such employers.

International Longshoremen & Warehousemen, dominant on West Coast docks, principal union in Hawaii, important in western distribution.

Marine Cooks & Stewards, crew members of shipping lines berthed on the Pacific Coast.

Mine, Mill & Smelter Workers, non-ferrous-metal miners and fabricating-plant employees, centering activities in the mountain states, dealing with Anaconda, Kennecott, Climax, Phelps-Dodge, and other such producers of copper, lead, zinc, brass, silver—and a little uranium.

United Office & Professional Workers, white collar employees; from unskilled to highly skilled draftsmen and engineers entrenched in insurance companies, some title and financial institu-

tions, book and magazine publishing, social agencies, movie companies; dealing with John Hancock, Metropolitan, R. L. Polk, Standard & Poors, M.G.M., Viking Press, Random House, and others.

United Public Workers, civil service and exempt employees in federal, state, county, and municipal jobs; large labor factor in Washington and in the Panama Canal Zone.

Farm Equipment & Metal Workers, chiefly in the agricultural machinery field with some spillover in metal fabricating, now nominally merged with the U.E.; has over the years been concerned with employers like International Harvester, Caterpillar, John Deere, and others.

International Fur & Leather Workers, dominant union in furs, luggage, glove-making, some strength in leather furniture; dictates to the fur trade in New York, Chicago, other centers.

Food, Tobacco & Agricultural Workers, principal organization in cigarette manufacturing, important in West Coast canneries, food processing, Alaska fisheries; deals, among others, with American Tobacco, General Foods.

Fishermen & Allied Workers, covers Alaska, the Pacific, Atlantic, and Gulf Coasts, the Great Lakes and other inland waters; takes in crews of fishing boats, fish handlers, some plants processing fish by-products for pharmaceutical use.

American Communications Assn., telegraphers, teletypists, operators of mechanical communication equipment and miscellaneous employees; principal interest in Western Union, Mackey, International Telephone & Telegraph, Pacific Cable, ship-to-shore transoceanic communication.

Communist leadership claims over a million adherents in these unions; the C.I.O. says there are around 600,000—of whom many are eagerly awaiting an opportunity for non-Communist representation. The truth probably lies somewhere between.

II. The Struggle for Contracts

But the competition for membership is only one phase of the developing struggle. What may prove more important and decisive is the competition for employers. In America—in contrast to France, for example—contracts are the foundations of unionism. The success or failure of left-wing and right-wing forces depends on which faction does the bargaining and signs the contracts with G.E., Westinghouse, Allis-Chalmers, International Harvester, Pacific shippers, and others.

• **Employer Influence**—To a certain extent, by pursuing practices and policies which are perfectly legal under the



I MET NEW ENGLAND when Bill said "Yes" and Red said "No"

Queer guys—those partners of mine. Took me years to get to know their minds.

"But you wouldn't want to live in New England," shouts Red at Bill.

"Yes I would," shouts Bill back.

"And so would my wife and kids. It's vacationland to them—with a big V.

"If we moved our plant to New England, what about labor?" I put in quietly.

"Well, what about labor," says Red vehemently. "Don't know anywhere in the country where labor and management seem to get along better than they do in New England. Look at the record. New England is the most highly industrialized section of the country. They've got more different kinds of plants—make more different products than any other section. And they've had smaller man-hour losses due to

labor trouble than any other section of the country. I'm telling you we'd get a good steady supply of high grade skilled labor if we moved to New England."

"Yes and we'd get plenty of reliable, steady power there too," cut in Bill. "And the kind of clear water that would be good for our processing plant."

"No trouble about transportation..."

"We'd be better able to hit that strong New England market..."

"To say nothing of being located closest in the United States to the export markets..."

"Well, I'm glad you fellows both agree," I said. "Because I've about made up my mind that we'd better look for a specific location in New England right now. New England's got more advantages per square foot than anything I've seen yet."



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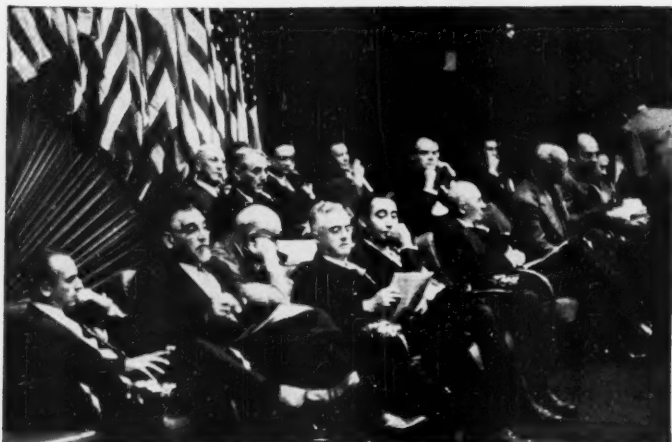
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The Right Forces a Showdown . . .



C.I.O. RIGHT-WING LEADERS controlled the convention platform and legislative machinery in the fight on pro-Communist unions. The left fought stubbornly from the floor.

The Left Attacks . . .



HARRY BRIDGES of longshoremen took over as floor leader for the left, to demand "autonomy and unity" for leftist unions.



ABRAM FLAXER of the Public Workers, another of the dozen unions under fire, joined the campaign. So did . . .



DONALD HENDERSON who heads the Food & Tobacco Workers, and who recently signed non-Communist oath, and . . .



JOSEPH SELLY, American Communications Assn., who objected to "little Taft-Hartley oath law" in C.I.O.'s constitution.

Taft-Hartley Act, employers can exercise some influence over the outcome of the looming competition. Some companies will find themselves helplessly enmeshed in a jurisdictional clash between warring union groups; as many others can tip the scales in favor of one union or the other.

One company may find rival organizers trying to outpromise each other at the employer's expense in a bid for employee support; but another may well be offered special bargains from competing union negotiators who want nothing so much as an employer agreement to deal exclusively with them.

The "more favorable deal" approach is a tactic which has been pursued before by both left- and right-wing leaders. It will be used more energetically in the future. It can appeal to the short-run interests of many employers.

• **Similar Tactics**—The appeal is the stronger because lately there has been little difference between the bargaining objectives and tactics of the left and right wings. Even the C.I.O. majority was hard put to find strictly trade-union issues on which to move against the Communists. The only trade-union issue was the left-wing attack on Philip Murray's steelworkers for being "too soft" in accepting the fact-finding board's recommendation to forget about wage increases.

Officially, the case for expelling the leftists rested, primarily, on their opposition to C.I.O. policy in favor of the Marshall Plan and the Atlantic Pact and on their ardent support for the Henry Wallace party and the World Federation of Trade Unions.

III. Left vs. Right: Differences

For constitutional reasons, the right-wing leaders of the C.I.O. had to make their case against the leftists on what everyone acknowledged were piddling grounds. But the real issue was understood by everyone involved. That issue was communism.

Philip Murray acted on the belief that a labor movement can have no real unity when one section of it acts in response to the needs of the situation in which it operates—insofar as its leaders understand them—while another section acts in response to the needs and policies of a foreign government with an anti-American ideology. As long as America and Russia were on friendly terms, Communist and non-Communist unions could get along. But that time appears to have passed.

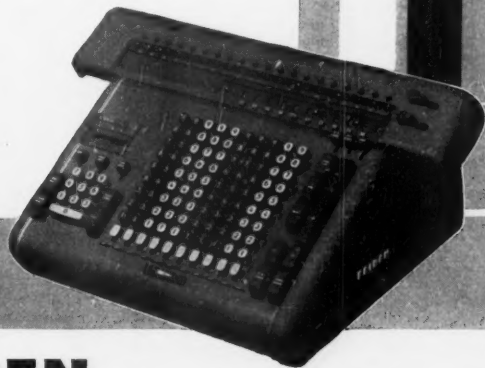
• **No Peace**—Nor is it possible for the left and right to go their separate ways in peace. Labor relations are today a game of follow-the-leader. When one big union undertakes militant, anti-employer policies, others, which might prefer stability and collaboration, have

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The Right Counterattacks . . .



WALTER REUTHER, an arch-foe of communism, criticized leftists as "colonial agents . . . of the Soviet Foreign Office."



JOSEPH CURRAN, who tossed leftists out of N.M.U., said they want to "wreck C.I.O. on orders from the Communist Party."



GEORGE BALDANZI of the textile workers said leftists oppose U. S. policy, remain "eloquently silent" about Soviet policy.



JAMES CAREY, C.I.O.'s secretary-treasurer, let others lead fight; his role is to save U.E. members for C.I.O. when . . .

U.E. Sets a Separate Course . . .



U.E. LEADERS Julius Emspak (left), Albert Fitzgerald, and James Matles didn't wait for expulsion. They quit the convention, and confidently to plan U.E.'s fight to survive.

to do the same. As long as a left-led U.E. is strong enough and unchallenged in its jurisdiction it can set the pace for a large section of the labor movement.

Thus, before the C.I.O. can see and act on the special circumstances of the various industries in which it operates, it must first break the grip of Moscow on its affiliates.

No employer can assume that his relations, now or in the future, will be better with a non-Communist than with a Communist union. But there is a basic difference in the probabilities:

- Native unions tend to settle down, grow more conservative, more concerned with the problems of the industries in which they operate and the prosperity of the firms with which they deal.

- Communist unions, dedicated to the overthrow of capitalism, consider the labor movement a training ground for revolutionary forces; they believe that an employer is a class enemy who must at times, for tactical reasons, be cajoled, appeased, or humored, but must, as quickly as possible, be destroyed.

It is on this reasoning that some American employers have, in the past, made substantial sacrifices of their immediate interests to oppose Communist influence over their labor force. Others prefer to maintain that "unions are all the same."

IV. The Influence of Government

The "unions are all the same" doctrine will be official government policy in the developing labor clash. Under the Taft-Hartley act, every union which files non-Communist affidavits is entitled to the same consideration from the National Labor Relations Board. Most of the embattled left-wing organizations have filed these affidavits; the Dept. of Justice is now investigating charges that the affidavits are fraudulent.

But while the Justice Dept. may eventually prosecute some leftist union leaders for filing false oaths, NLRB in the meantime must hear and process their cases and give their unions a place on election ballots. Much of the fight for recognition and bargaining status will be decided in NLRB collective bargaining agency polls.

- **Discretionary Powers**—The board does have some discretion which it may see fit to use. Most important is the matter of determining the appropriate bargaining unit. Here is how that becomes important:

Company A has 15 plants all about the same size. Union locals in those plants divide up—five left-wing, eight right-wing, two split pretty evenly. If NLRB rules that the representation question should be decided on a company-wide basis, the right-wing wins,



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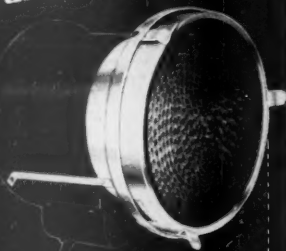


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The Right Celebrates Victory



THE WINNER, Philip Murray—pleased as Punch but weary after a long fight against Communist influence in C.I.O.—is aware that bitter jurisdictional clashes are still ahead.



ELATED DELEGATES demonstrating for a reelected Murray seem ready for the fight.

and the left loses its fractional control in the company. If the board decides, however, that the appropriate bargaining unit is a plant unit, the left-wing retains control of labor in five to seven of the company's plants.

In addition to ruling on appropriate units, NLRB is an important factor through its authority to set election dates and places, to deal with ballot challenges and charges of unfair labor practices against unions or employers. It also interprets the law's ban on coercion in the choice of a bargaining agent.

• **Court Issues**—Public authority will also be drawn into the imbroglio as

courts begin hearing suits, claims, and petitions on the litigation that is sure to grow out of intraunion battles for papers and records, funds, offices, contracts, use of the union name. Ironically, the injunction clause which labor hates so much will become a principal weapon of each side in curbing the activities of the other. And that aptly symbolizes the character of the unfolding clash.

V. Three Years of Strife

The internecine labor war will be dirty, violent and bitter. Anyone, any

employer, who is exposed to it will be very lucky to escape undamaged.

It may be expected to last as a significant factor in the labor equation for about three years. By that time, barring unforeseen changes in American society or dramatic switches in international affairs, the Communist section of the labor movement should be an isolated, identifiable splinter having only an inconsequential influence in union-management relations.

Beck Loses Out On Boeing Vote

Dave Beck lost his bid last week to bring Seattle aircraft workers into the A.F.L. Teamsters Union (BW-Oct. 15'49,p112). In a National Labor Relations Board election, 15,000 Boeing Airplane Co. workers voted for the International Assn. of Machinists (Ind.), 8,107 to 4,127. The rest of the ballots were challenged, void, or rejected both unions.

Immediate effect of the vote was to put the machinists back in the saddle in the biggest employment unit in the Puget Sound area. But Beck, executive vice-president of the teamsters, refused to take it lying down. His attorney said he will challenge the election because around 200 ballots were misprinted.

The misprint erroneously identified the machinists with the A.F.L. Beck's lawyer argued that this confused some voters and led others to believe that the teamsters lied in saying the machinists were no longer affiliated with the American Federation of Labor.

The NLRB vote climaxed a campaign that stirred bitter rivalries within and beyond the walls of Boeing. The machinists had held bargaining rights until they staged a six-month strike, which the courts later held illegal (BW-Jul.3'48,p68). Beck then stepped in with a jurisdictional claim and launched an organizing campaign. Both sides shot the works for the election—with newspaper space, billboards, bus cards, and radio appeals.

Even if he loses the appeal, Beck isn't giving up. His men will continue to organize at Boeing. "The teamsters will win regardless of how long it takes," he said.

The Pictures—Acme—104 (bot.), 116; Int. News—102 (l), 119; Syd Karson—20, 56, 58, 59; Wide World—90, 100 (l); Dick Wolters—Cover, 62, 98, 100 (4), 102 (4), 104 (top).



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Remington Rand

BUSINESS MACHINES AND SUPPLIES DIVISION

Strike's End

Steel strike draws to a close as one independent after another signs with union and Big Steel offers terms.

The first simultaneous nationwide coal and steel strikes drew near an end this week. John L. Lewis ordered his United Mine Workers to go back into soft-coal pits—at least until Nov. 30 (page 24). And steel output began to climb again as one major company after another signed pension-insurance contracts with the United Steelworkers of America (C.I.O.).

• **Republic, J.&L.**—Republic Steel Corp., third largest producer, Jones & Laughlin Steel Corp., and Youngstown Sheet & Tube Co. agreed on contract terms with the union early in the week. They signed agreements similar to that reached a week before by the Bethlehem Steel Co. and U.S.W. (BW—Nov. 5-49, p19).

• **Big Steel**—At midweek, it appeared that other important settlements were near at hand. Pension-insurance negotiations were going on between the union and a dozen or more medium-sized producers. And the giant United States Steel Corp., which produces about 32% of the nation's steel, presented a new contract offer to the union. Union officers were optimistic about the possibility that most steelworkers would be back in the mills next week.

The strike began on Oct. 1 when 500,000 steelworkers quit their jobs in support of demands for noncontributory pension and insurance benefits. The first break in solid opposition by major companies came after one month, when Bethlehem agreed on noncontributory pensions, jointly-financed insurance benefits.

Two contracts signed this week provide:

Jones & Laughlin: Exactly the same pension and insurance programs as incorporated in the Bethlehem pact. The company will pay for \$100-a-month minimum pensions—including social security—for workers with 25 years' service at age 65. J.&L. has had a noncontributory pension plan paying an average of \$48, not counting social security. The new agreement also sets up an insurance program to be financed jointly, employer and employee each paying 2½¢ an hour. J.&L. already had a contributory insurance plan.

Republic: Exactly the same pension program as Bethlehem and Jones & Laughlin, but a minor difference in the insurance plan. Republic's present contributory insurance program will be continued, but benefits will be increased



Every Seven Seconds

Ætna Life Pays a Group Insurance Claim

Every seven seconds of every working day the Ætna Life issues a draft in payment of a Group Insurance claim. Each lightens the burden imposed on some worker or his family by accident, sickness, old age or death. Each builds goodwill for far-sighted business management.

The manner in which claims are settled tests the ability of an insurance company to serve its clients. The Ætna Life enjoys an enviable reputation countrywide as a company unexcelled in the handling of claims.

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Group Division ÆTNA LIFE INSURANCE COMPANY Hartford, Conn.





Two-second fastener cuts production costs!

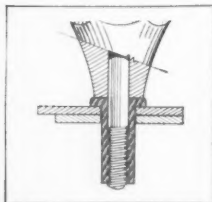
IN the picture above, a Rivnut is being threaded onto a Rivnut heading tool. Two seconds later it will be completely installed, ready to take an attachment screw!

Rivnuts—the *only* one-piece blind rivet with threads—reduce man-hours of assembly work, cut production costs. Used as a “blind” rivet, a Rivnut can be installed in hard-to-reach places where ordinary rivets wouldn’t work. And it can be installed after enameling or painting,

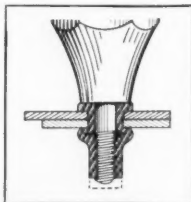
without marring the finish. Used as a nut plate, Rivnuts provide at least six clean threads for secure attachment.

Rivnuts are installed with a simple, easy-to-use power tool—or a manual tool. No special experience is needed. You have fewer rejects. And the quality of Rivnut fastening means better service from your product, greater customer satisfaction.

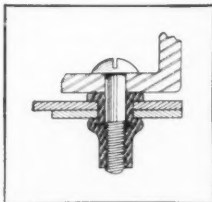
Write for details today. And ask for a free Rivnut “demonstrator”. The B. F. Goodrich Company, Dept. T, Akron, O.



1. Rivnut, threaded onto pull-up stud of tool, is inserted in work.



2. Pull-up stud retracts, forming bulge in the Rivnut shank.



3. After upset, Rivnut threads are still clean, ready for attachment.

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through a bigger company contribution. The cost will be 34¢ an hour for employees (same as now) and 24¢ an hour per employee for Republic. Only previous Republic pension plan covered salaried employees earning more than \$3,000 a year.

The new contracts run to Dec. 31, 1951. They can be reopened on wages only after Nov. 1, 1950. The pension and insurance programs are frozen for five years.

LABOR BRIEFS

Two challenges of the government’s injunction powers in major strikes collapsed this week when the Supreme Court (1) rejected a United Mine Workers-John L. Lewis appeal from a \$1,420,000 fine for contempt of an anti-strike order; and (2) held that Judge Goldsborough acted within his rights in issuing an injunction against the miners in 1948, under the President’s general executive powers.

Taft-Hartley violation was what NLRB called the demand by the International Typographical Union (A.F.L.) for unilateral “conditions of employment” in Chicago. NLRB also decided that a trial examiner can dismiss an unfair labor practice complaint brought by General Counsel Robert Denham if NLRB had previously refused to take jurisdiction in the case.

A 110-day strike ended this week at the Dravo Corp. shipyard in Pittsburgh. Company and C.I.O. shipbuilding union compromised their dispute over union security, seniority, and other issues. Wage demands weren’t involved.

A new dock strike—if and when it comes—will catch Hawaii prepared. Gov. Stainback last week signed a bill empowering him to seize and operate docks.

A holiday for hunting, with full pay, is provided in SKF Industries’ union contracts. So SKF’s Shippensburg (Pa.) plant closed for a day last week.

A 40-hour week, at 48-hour pay, is sought by the Brotherhood of Locomotive Firemen & Enginemen for 25,000 members employed in yard, transfer, and beltline jobs. Union claims their work is similar to that of “nonoperating” rail employees, so they should have the same work terms.

Strike plans by AFL longshoremen in Gulf ports evaporated last week after employers offered to pay 7¢ an hour into a union welfare fund.



Studebaker USES "J" TYPE SPEED NUTS *Saves 35% on Fender Assembly Cost*

Right out of Studebaker's own cost estimate files comes this report of outstanding SPEED NUT savings.

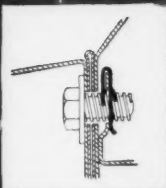
To establish this saving factor, tests were made using 18 welding nuts to fasten the rear fenders to the body. Then, for comparison, 18 "J" Type SPEED NUTS were used to perform the same operation. The resulting statistics reveal that SPEED NUTS provide a 35% savings in material and assembly costs on this application.

This is one reason why there are hundreds of

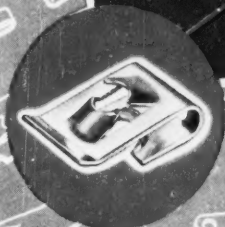
SPEED NUT brand fasteners of various types used in the assembly of the 1950 Studebaker.

Here, too, is sufficient reason why you should investigate the SPEED NUT way to lower assembly costs and improved product quality. Ask your Tinnerman "Fastening Specialist" for information on the comprehensive Fastening Analysis Service . . . and write for your free copy of SPEED NUT Savings Stories. TINNERMAN PRODUCTS, INC., 2040 Fulton Road, Cleveland 13, Ohio. In Canada: Dominion Fasteners, Ltd., Hamilton.

"The Next Look in Cars"—
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Speed Nuts

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How some Good Old Horse Sense

Can Cut Your Painting Costs

Shrewd old "hoss traders" will tell you "Never buy a horse without looking at his mouth... yes sir, open it up and take a good look if you want to know his worth."

The same applies to paints. Many a smart dollar has been saved on a painting job by using a little horse sense. You do this by comparing a can of "Barreled Sunlight" with a

can of any other paint you choose. Naturally, you pay no attention to the cans or the price tags on them. What pays off is what's in those cans. You have to *open* them... thin the contents according to directions... and then test on a wall where you can actually see the difference.

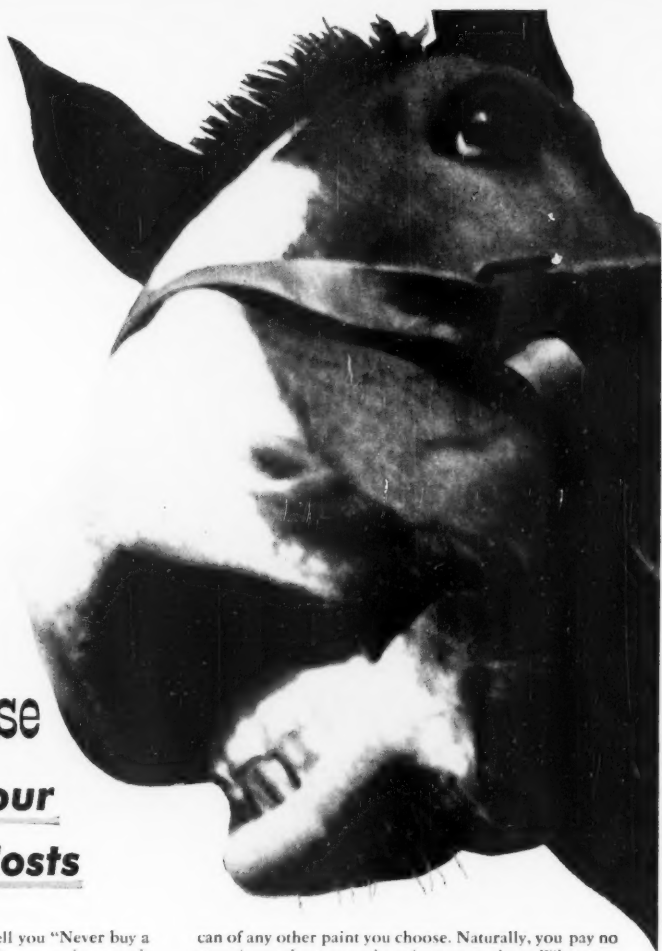
Compare the two... for yardage, solid coverage per coat and appearance after drying. Yes, *and because labor represents eighty per cent of the cost of painting*, see which paint goes on *faster*. With a fair, true test like this, it doesn't take much mathematics to figure that "Barreled Sunlight" will give you a better looking, longer lasting paint job *for less money* than any other paint you want to name. Talk it over with our representative. He'll call at your convenience. Write.

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INTERNATIONAL OUTLOOK

BUSINESS WEEK

NOVEMBER 12, 1949



Don't expect too much from the Acheson-Bevin-Schuman get-together.

The three foreign secretaries have a tough problem on their hands—how much to dismantle in West Germany, how much to leave as is.

Only last April these same statesmen agreed on a policy. But German pressure is making that unworkable.

What's really at stake now is the role West Germany is to play in the western European economy.

Acheson has no intention of simply scrapping the April agreement altogether. Nor will he take the German offer of paying reparations either with current production or with stock in enterprises earmarked for dismantling.

The U. S. will stand by the April list of prohibited industries. That means the Germans must give up their synthetic rubber and gasoline plants.

What's more, the U. S. will expect the Bonn government to pay a price if it is to keep the rest of the disputed plants. The price: closer supervision of German industrial production.

What the U. S. would say, in effect, to the Germans is this:

If you want to save some plants, you will first have to reassure your neighbors that you want economic and military peace. That means agreeing to two things:

(1) Close cooperation with the International Ruhr Authority. Its job is to divide the Ruhr's basic output between exports and domestic consumption. Now the Germans have observers on this board. The U. S. wants the Bonn government to commit itself to international control by taking over the three seats now held for Germany by the Allied High Commission.

(2) German support for the goals of the Allied Security Board. This board polices German industry for war potential. The U. S. wants the Bonn government to help with this job.

Coming sensational disclosure: War materials are being smuggled from West Germany into the Soviet bloc. This will drive home the need for industrial policing.

U. S. officials already have evidence of illegal shipments of ball bearings suitable for tanks and other war equipment.

The bearings are from hidden stockpiles, not under-cover production. None of Germany's top bearing producers are involved.

Still, one small German firm will probably be found guilty. And that makes the Allied High Commission feel it's time for a crackdown on the security issue.

The Truman Administration seems almost as listless about European economic unity as Europe itself (BW-Nov.5'49,p24).

True, almost everybody from Truman down agrees that a single European market is a good long-range policy. Acheson, for one, is getting on the bandwagon.

Then, there's this fact, of course: The Administration has to push a unity policy if it's to keep Congress sold on the Marshall Plan.

But apart from ECA, Washington doesn't count on much in the way of concrete results even by 1952.

You get this sort of clash in views over Germany's role in a union:

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

NOVEMBER 12, 1949

ECA makes the argument that West Germany must be integrated now—while union still offers the Germans some advantages. A year from now Germany will be too strong. Joining a union then would mean giving up too much.

State Dept. officials don't think French industry is efficient enough now to face wide-open German competition. They point to this: In the first eight months of 1949, German exports to France were \$103-million, French exports to Germany only \$11-million. What would happen, they say, if all trade bars between the two countries came down?

•
Don't be misled by the "peace" talk in Malenkov's recent Moscow speech.

What Malenkov really said was this:

(1) Now that China is Communist, all Asia is in the bag. (The speech had a pointed reference to India via a quotation from Lenin.)

(2) Peace in Europe will be secure if the German people take things in their own hands, communize the Ruhr, and join the Soviet bloc.

(3) Russia will soon match the U. S. in industrial capacity and atomic power.

•
Will Tito set up an anti-Stalin Communist International?

Soviet purges of government leaders in Hungary, Bulgaria, Poland, and Czechoslovakia suggest that Moscow fears just that.

But there's evidence that other leaders behind the Iron Curtain are ready to join Tito if he can get enough support from the West.

Even the Trotskyites (anti-Stalin Communists) in western Europe have offered Tito their backing. The Yugoslav dictator, though, isn't keen about joining forces with the Trotskyites. He's not sure that would help him in Washington and London.

•
Washington is hoping the new United States of Indonesia will look to the Dutch in trade, financial, and defense matters.

The loose Indonesian federation formed at The Hague last week has no guarantees that this will happen. In fact, the USI is to be sovereign in trade and defense.

But will the Indonesian leaders see the need for keeping the Dutch around—using the Dutch navy for protection?

Washington thinks this is the key to making Indonesia a stronghold against communism.

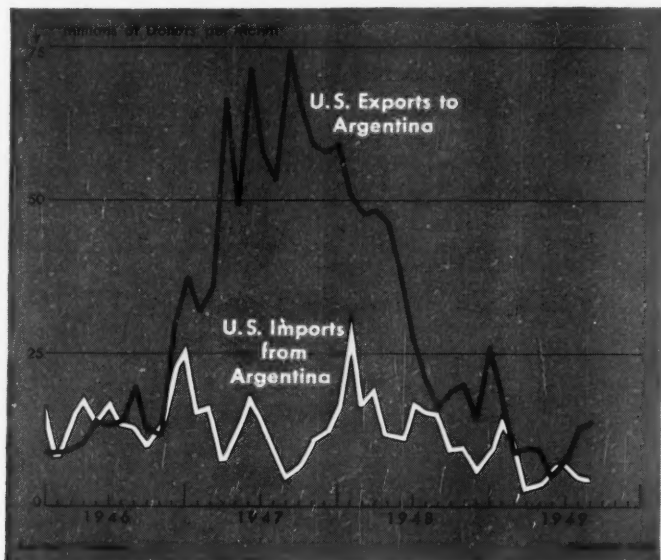
•
ECA's interim release of \$40-million to the Indies is to be handled jointly by the Indonesians and the Dutch.

And Washington wants the Dutch to have a hand in dishing out additional U. S. dollars. Undoubtedly, it will make a difference in the size of future loans.

The Export-Import Bank approved a \$100-million loan to Indonesia back in 1947. The loan lapsed in June, 1948, because of the fighting there. Now the bank will have to study the country again. But another \$100-million loan seems likely before the end of 1950.

A World Bank loan of \$30-million or so is probably in the cards once the new nation is taken into the International Monetary Fund.

BUSINESS ABROAD



U. S. Aim: More Argentine Trade

Current trade talks should smooth over the trade rift with Peron. But the Argentine dollar shortage and state-trading policies stand in the way of any real comeback.

Washington has decided to stop being mad at Argentina. In fact, the State Dept. and the Dept. of Commerce have been trying for some weeks now to get some sweetness and light into U.S.-Argentine trade relations.

Not that Washington is about to give its blessing to President Peron's mode of government. State and Commerce just think it's time to look to the lost Argentine market and the \$430-million private U.S. investment in Argentina.

• **Pricked Bubble**—It would be hard to find in U.S. trade history a better example of a pricked bubble than the one pictured in the chart above. In 1947 U.S. exporters did a \$700-million business in Argentina. When 1949 sales are added up, the figure probably won't be much, if any, above \$125-million. What's more, the new schedule of Argentine import licenses that goes into effect this week still leaves U.S. exporters out in the cold.

Of course, even the most starry-eyed officials in Washington can't envision trade ever getting back to the 1947 level. The war-built dollar balances that created the 1947 boom are gone for good. From now on Argentine pur-

chases will depend almost entirely on what Argentina can earn or borrow in the U.S.

• **Trade Talks**—That's why the problem of helping Argentina to sell more in the U.S. has been getting a lot of attention lately. U.S.-Argentine trade talks have been going on in Washington since September. At these talks Commerce Dept. officials have been offering advice on how Argentine traders might improve their marketing techniques for such traditional exports as wool, hides, quebracho, and cascine.

U.S. and Argentine officials have also been working on (1) a new treaty of friendship, commerce, and navigation (the present one goes back to 1853); (2) a convention on double taxation.

• **Freer Trade**—State and Commerce also have been nudging the Argentines on their state-trading habits. From the U.S. angle, things would look up a good deal if private traders had a freer hand in Argentina.

True, there are some signs of a change of heart in Buenos Aires. Until this year you could hardly buy or sell in Argentina without going through IAPI, the huge state trading monopoly set up

by Miguel Miranda. Now IAPI seems to be getting out of the business of buying in the U.S., except where government purchases are involved. IAPI's export activities are being cut, too, though not when it comes to basic exports like grain, meat, and hides. When U.S. traders add up these "reforms," however, they still feel that there is plenty of room for improvement.

• **Loans**—So far there has been no mention of loans at the Washington trade talks. U.S. officials think that Peron couldn't possibly take a U.S. government loan after all he has said against it. But he might get around to accepting a credit—he might, that is, if the U.S. would grant him one.

The way was opened for this several months ago when a group of private U.S. banks financed \$20-million worth of shipments from International Telephone & Telegraph Co. to Argentina. Some observers now wonder: If private banks will take the risk, why won't the Export-Import Bank?

What Ex-Im might be called on to do is to finance the long-proposed steel mill that Armco Steel Corp. has been retained to build at Port Nicholas. But it's no secret that Ex-Im has had few good words for Argentina while U.S. policy has been hostile. It would take a genuine U.S.-Argentine rapprochement to change that.

• **Argentina's Debts**—The new U.S. ambassador to Argentina, Stanton Griffis, has been pushing the rapprochement idea down in Buenos Aires. Recently he said publicly that Argentina should be one of the U.S.'s best customers and we should be the same for Argentina.

But that won't be easy until Argentina reduces the debts it has piled up in the U.S. Right now there's \$150-million due American exporters. Add to this another \$100-million or so due U.S. investors who have not been able to transfer their Argentine profits into dollars.

Argentina's immediate objective is to write off the \$150-million owed to our exporters. At this time, 30% of Argentina's dollar earnings from current trade are being funneled off for this purpose. But Argentina is earning only about \$10-million a month here now. Buenos Aires gets some additional dollars out of Europe, but not enough to change the picture much. So it will be some time before the trade debts are written off. Meanwhile, new export business will have to be strictly limited.

• **Other Troubles**—An era of good feeling with the U.S. isn't going to solve Argentina's problems by a long shot. The nation's troubles are too basic for that. Argentina, like so many other countries in the world, suffers from the breakdown of triangular trade with Europe. Before the war Argentina met its dollar needs by selling more to

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B. E. HUTCHINSON
Chairman, Finance Committee

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Europe than it bought there, then converting its sterling or marks into dollars. That's no longer possible except for small amounts. Argentina still has a big export surplus with Continental Europe, but it's based chiefly on \$1-billion in credits to European buyers. And its trade with Britain has been put on a strictly bilateral basis.

But even bilateral trade can develop its kinks, especially if you use a back-handed devaluation technique the way Buenos Aires did. It set a dozen different rates for imports and exports, varying with the commodity involved. In effect Argentina didn't devalue against the pound at all. What devaluation there was affected almost solely those products normally sold in the U. S.

• **Meat and Oil**—Apparently Buenos Aires figured that by not devaluing against the pound, they would (1) get sterling oil cheaper; and (2) be in a good position to ask for a higher price for their meat.

The meat price is still being haggled over, though the chances are that the British will have to pay more—probably enough to offset the 30% devaluation of the British pound. But the British have thwarted at least one of Argentina's aims. Oil deliveries under the Anglo-Argentine trade pact are tied to world prices for sterling oil. These prices have gone up almost the full extent of sterling devaluation.

BUSINESS ABROAD BRIEFS

Holland's Fokker Aircraft has been forced by the government to drop production of light civil and military aircraft. That limits Fokker to repair work and to building Gloster Meteors under license with England. The Dutch government owns shares in Fokker which it confiscated from Germany.

Procter & Gamble plans to widen production in Mexico this year. P&G has allotted a \$400,000 ad budget to pave the way in Mexico for new products.

Mexican Power & Light has received two loans (totaling \$34-million) from the World Bank. Purpose: to buy machinery and equipment for the Miguel Aleman and Necaxa power systems.

Australian Burr & Tool Co. has been formed in Sydney to produce all of Australia's requirements in dentist's burrs, plus some for export. Plant and technicians will come from Germany.

Mexico has contracted to buy almost \$1-million worth of eggs from the U. S. It will buy them at about 30¢ per dozen, sell on the Mexican market at 36¢. Move is aimed to deflate Mexican egg prices, now above 60¢.



Haiti's World's Fair There To Stay

It has always seemed a pity to tear down all those beautiful buildings when a World's Fair is over. To Haiti's frugal president, Dumarsais Estime, it's more than a pity—it's waste. Haiti's government is plunking down about \$26-million for buildings like

the one above for its International Exposition which opens this December. When the fair is over next June, the buildings will form part of a new city called Dumarsais Estime City, next door to Haiti's capital, Port-au-Prince.



You have been elected

It is time to recognize anew the obligations of leadership--the responsibility that attends your place in the business life of the community.

That there are influences at work right now--every day--attempting to disrupt and destroy the American way of life--has been plainly demonstrated. These forces, disguised though they be, are more active - more determined - more dangerous than ever before.

To save individual liberty and personal freedom--corner-stones of our civilization--may not be easy. As a leader you are called upon continuously to help form and direct a militant public opinion. Only by the united, vigilant efforts of all citizens of good will, those who cherish our principles of government and our ideals, will we maintain our invaluable heritage of liberty, justice and freedom.

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With only a \$20 investment in a small space advertisement in the "clues" section of **BUSINESS WEEK**, a firm secured a \$3,000.00 sale. And better yet, they received substantial inquiries for future orders up to \$10,000.00 each.

Want to see what "clues" looks like? Just turn to page 110.

British Target: Canadian Sales

All-out campaign for Canadian market means stiffer competition for U.S. producers. Canada backs British effort because it wants to sell to Britain and it's short of dollars to buy in U.S.

TORONTO—Britain is starting an all-out drive to sell more capital goods to Canada. It will certainly mean tougher competition—and may mean fewer orders—for U.S. sellers to the Canadian market.

The first big evidence of the British campaign will be seen here next May 29 at the opening of the 1950 Canadian International Trade Fair. A group representing six British trade associations (tool and instrument manufacturers) has already blocked off 35,000 sq. ft. of exhibit space for itself. That's the biggest single chunk of the 60,000 sq. ft. of show space that has been reserved so far.

• **Moving In**—In the meantime, scouts for the British selling drive are already moving into Canada. A six-man team representing British electrical and machine-tool industries has just arrived to set up headquarters at Toronto. The group also has plans for a network of "listening posts" to gather information on the equipment needs of construction projects that British manufactures could fill.

The technical director of one of Britain's largest manufacturers of heavy construction equipment, Ransomes & Rapier, Ltd., is in the middle of a nine weeks' selling tour in Montreal, Toronto, Winnipeg, Regina, and Edmonton. He's offering concrete mixers, road-making machinery, mobile cranes, excavators, sluice-gates for dams. Ransomes & Rapier reports enough inquiries from the trip to encourage the company to set up a Canadian subsidiary.

Another British salesman, Moir Mackenzie, chief of the Federation of British Industries' overseas-trade division, is now in Canada to get a toe hold for a group of British selling organizations.

• **Rewarded Effort**—Experience has proved that these sales outposts pay off. A year ago, a group of British diesel-engine producers formed a Canadian sales subsidiary, Brush (Canada), Ltd. Brush reports that in the year it has booked orders totaling \$250,000; it expects "three or four times that amount" in the next six months.

Canada is cooperating full strength with all these efforts. It recently set up a Dollar-Sterling Trade Board to help out. Strictly a business organization (though actively supported by C. D. Howe, Trade Minister), the board is headed by James S. Duncan, president of the Massey-Harris Co., manufacturer

of farm machinery (picture, below).

• **Canada's Goal**—The aim of the board is to stimulate Canadian purchases of British products so that Britain can continue to buy in Canada. At the moment, Britain pays for most of its Canadian purchases with ECA funds and Canadian credits to London.

Canada has another reason for wanting to see more British goods in the Canadian market. The Dominion, like everybody else, is short of U.S. dollars. When ECA quits buying Canadian wheat for Britain, Canada's dollar supply will be even shorter. It will need British goods then to replace the American goods that it can't afford. Before the war, Canada could buy freely in the U.S., by converting into dollars the sterling it earned from exports to Britain.

It's true that Canada has made some progress in building up British trade. Imports from Britain moved up from \$169-million for the first seven months of 1948 to \$193-million for the same period this year. But during the same time, Canada's imports from the U.S. of durable goods alone rose from \$425-million to \$506-million.

That durable-goods item is the one that hurts Canada's trade balance most. Last year, when U.S. manufacturers got a \$425-million share of Canada's market for durables, Britain sold the



HEAD of Canada's new Dollar-Sterling Trade Board is J. S. Duncan, president, Massey-Harris Co. His job: to boost Canadian-British trade.

Dominion only \$28-million worth. That's why the new British drive to sell more capital goods in Canada is getting a warm reception in Ottawa.

• **Britain's Goal**—For the British, the campaign in Canada is part of the overall drive to close the dollar gap by 1952 (and the end of ECA). Conservatively, this calls for a trebling of exports to the North American continent. Speaking not so conservatively, Harold Wilson, head of Britain's Board of Trade, said recently that Britain could increase its exports to Canada tenfold.

• **Price Advantage**—Wilson's enthusiasm had some foundation. It was a post-devaluation statement, and devaluation has given British products a double advantage in the Canadian market. Not only does the devalued pound cut prices of British goods in Canada, but Canada's 10% devaluation vis-a-vis the U.S. dollar raises prices of U.S. goods here.

Even before devaluation, some British heavy machinery had a price-edge over U.S. competition. The Canadian preferential tariff accounted for some of the margin. This gives British products an advantage over U.S. products of from 10% to 15%. But just as important is the fact that British makers of capital goods usually offer a simple, straightforward, and cheaper product. U.S. producers supply more complete equipment—and more frills.

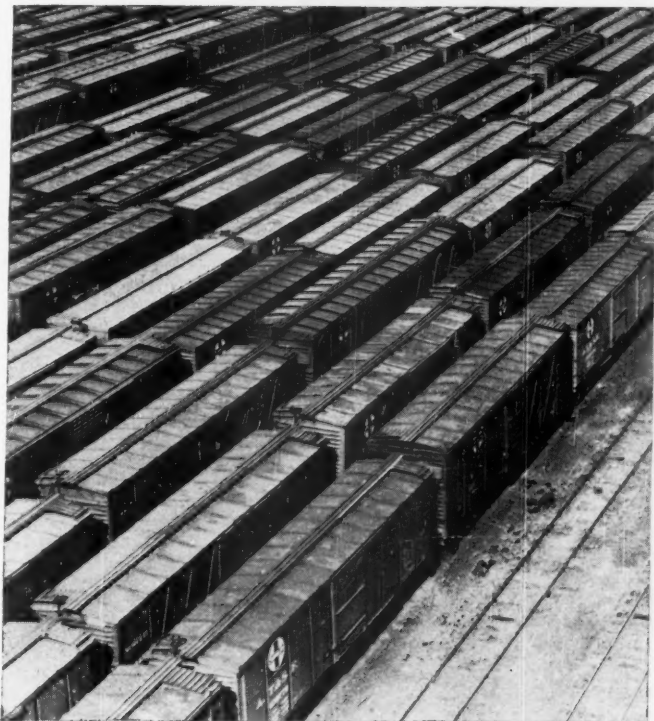
For example: A turret lathe from Britain was priced (pre-devaluation) at \$12,500 in Toronto; a similar American lathe, with prescriptive speed changer and other gadgets not on the British model, cost \$16,000. Similarly, a British radial drill with 15 speeds and nine different feed rates cost \$13,000; a U.S. model with 24 speeds and 18 feed rates cost \$17,000.

• **Delivery Disadvantage**—But lower prices alone aren't going to solve Britain's sales problem in Canada. Suppliers will have to speed up deliveries, which, particularly in the capital-goods field, have been far slower than U.S. deliveries. Some British manufacturers plan to set up warehouse stocks across Canada to speed deliveries.

Even with quick delivery, British suppliers will have a hard time cracking the market. Most of Canada's industry is equipped with U.S. machinery; replacements will tend to come from the U.S.

Western Germany industry is also making a play for a slice of the Canadian market. A group of German businessmen recently toured Canada to feel out markets (and to make plans for shows in the 1950 Trade Fair). The eight-man team represented German manufacturers of optics, oil-drilling equipment, chemicals and pharmaceuticals, ceramics, asbestos, toys, watches, and jewelry.

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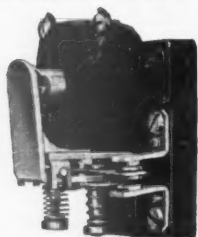
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This up-to-the-minute information is just one big reason why you will find it profitable to ship "Santa Fe—all the way." For a copy of our Red Ball Information folder and more details on how we can serve you, see your Santa Fe freight representative.

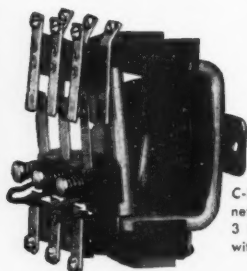
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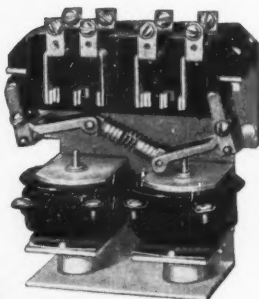


C-H Bul. 9575 Type A Magnetic Contactor. Open type. 1 N.O. and 1 N.C. contacts.

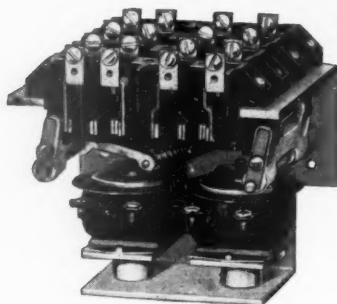


C-H Bul. 9575 Type D Magnetic Contactor. Open type. 3 N.O. and 3 N.C. contacts with 2 wire separate control.

Industry's electrical engineers and machine designers find reliable answers to their control problems in these service-proven Cutler-Hammer Contactors



Shown here are typical C-H electrically operated mechanically held contactors. Silver to silver double break contacts, quick make and quick break, positive operation. Vacuum impregnated coils.



INDUSTRY's electrical engineers and the designers of machinery have found Cutler-Hammer control components the safe and convenient means of building up special control equipment to meet their needs. In magnetic contactors, for instance, Cutler-Hammer offers a broad line of both A.C. and D.C. units in a wide range of types and sizes, in a wide range of contact capacities up to 600 amperes, in a variety of normally open and normally closed contact arrangements, with coil voltages from 6 to 550 volts in 25, 50 or 60 cycles, for continuous or intermittent duty, in electrically or

mechanically held types, in open construction for panel mounting or in NEMA Type 1 enclosures. Whatever your control problem, ask Cutler-Hammer. . . CUTLER-HAMMER, Inc., 1275 St. Paul Ave., Milwaukee 1, Wisconsin. Associate: Canadian Cutler-Hammer, Ltd., Toronto, Ontario.



Aiding Exporters

ECA is doing all it can to help small businessmen get their slice of Marshall Plan export business.

When Congress was writing the ECA law, many legislators were worried that the small businessman wouldn't be able to get a slice of the business. So Congress asked ECA to do "anything possible" for the little fellow.

This week in virtually every city in the country that mandate is being carried out. With the help of some 2,000 local chambers of commerce and the 42 field offices of the Dept. of Commerce, ECA's Office of Small Business is out to register by Nov. 30 all small businessmen who want to get into the export business.

Names, addresses, and descriptions of the products of hundreds of firms will be collected. These will be compiled in book form and placed, free of charge, in the hands of European importers and importing agencies that are actually placing orders under the Marshall Plan.

• **Sealed Bids**—Another thing that Congress asked ECA to do was to get the Europeans to give out buying information as far in advance as possible. Thus, the small businessmen in the U.S. would have a chance to bid. But at the same time the legislators also warned ECA to respect "normal trade channels." And it isn't normal for Europeans trading with the U.S. to ask for sealed bids. It's even rarer when they open those bids in public. So this has been the toughest job for ECA's "small business" staff.

Where practicable, ECA has been urging the sealed-bid system on the Europeans. To date, only the Austrians have taken the plunge. Last month bids were asked on a lot of small orders for pharmaceutical raw materials, drugs, and timber products. ECA got the word only a week before the last bids closed. And ECA still doesn't know if the bids were opened publicly. But it is a step in the right direction.

ECA has actually been doing some buying itself under the sealed-bid system—for the China and Korea programs. This has allowed some small firms to steal the show occasionally. Take the case of a \$2.3-million order for 45,000 tons of fertilizer for Formosa that came up last month. Bids for parts of the order came from Ford, Koppers, and other big firms. But a small firm—Best Fertilizer Co., with plants at Baltimore, Houston, and Oak-

land-walked off with a contract to deliver 30,000 tons for about \$1.3-million. Best's bid of \$46.10 per ton was over \$13 below Ford and Koppers.

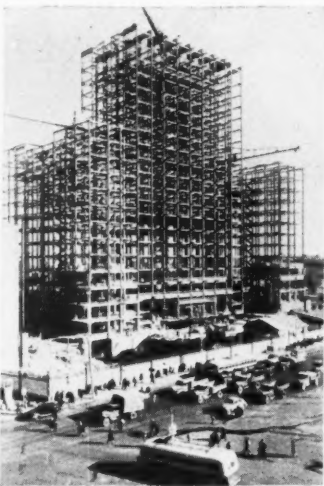
ECA's office of small business has some other projects to its credit. Here are a few:

"Export counseling" to introduce small businessmen to the mysteries of foreign trade and ECA operations. This service will be topped with several "field offices" around the country, staffed by volunteer bankers and businessmen who will advise new exporters on the spot. The idea is to avoid writing to Washington for details.

A register of European importers who are buying under the Marshall Plan. This is now coming off the presses in Britain.

A pamphlet on the "show-how" of exporting (which warns that it isn't a business for everybody). Another more detailed guide is on the way, which will try to show the commodities Europeans are most likely to want.

Burt M. White, chairman of the office, is playing with many more ideas. He would like to see more small businessmen invest abroad. So he's ready to put them in touch with European manufacturers who need their know-how or want to buy a license to produce their product. Also, he'd like to see more small businessmen band together, as some machine-tool makers have, to go into the exporting business.



Skyscraper for Moscow

Russia is out to show that capitalists aren't the only ones who can build them tall. This office building, now going up on Moscow's Smolensky Square, will be 26 stories high. Another project underway: a 32-floor tower for the Moscow State University.

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The Labor Union Monopoly Bites ALL Workers

What kind of government is it which:

... Prosecutes the Great Atlantic & Pacific Tea Co., which it asserts handles about 64% of the retail food-distributing business, as an illegal monopoly in restraint of trade, and

... Seeks to break up four big meat packing companies and make them into 14 companies, charging the four with being a monopoly in restraint of trade, but

... Makes no move whatsoever to apply the federal antitrust laws to the exercise of virtually 100% monopoly control of labor in the coal industry, and the only slightly less complete monopoly control of labor in the steel industry?

The answer to that question is simple. It is class government of the most flagrant type, a government by which special privileges are dispensed without justice and to the great injury of all workers. It is the kind of government which will lead to the early sacking of the American enterprise system and the personal freedoms of workers.

In legal terms the explanation of this flagrant affront to good government is also simple. In 1932 labor union activities were given virtually complete exemption from the application of the federal antitrust laws by passage of the Norris-Laguardia act.

When the Norris-Laguardia act was passed, labor unions were relatively weak. Only about 16% of the nation's industrial workers were organized, only about 12% of the steel workers. About two-thirds of the coal miners were union members, but only half that number were paying dues. The country was in the depth of its worst depression. The unemployment of about one-fourth of the labor force made monopoly control by labor seem so remote as to be almost fanciful.

But after only seventeen years devoted to the promotion of labor union organization by the federal government, we have labor monopoly with us. In its power and scope it makes the alleged business monopolies being prosecuted under the federal antitrust laws seem positively piddling. In its manners it makes the old-time business monopolists look like Lord Fauntleroy.

What is lacking, grievously lacking, is action by Congress; action to shape our federal antitrust laws to take account of the labor monopoly that has become the dominant national force in our country today—a force that is leading to the loss of freedom of all workers.

Before labor monopoly is broken up, as it must be broken up if our economy is not to be permanently wrecked, other steps will no doubt be required. But one test more than any other will be the touchstone of the nation's determination to keep its economic and personal freedom. It is what it does to see that labor monopoly receives the same treatment under the federal antitrust laws as any other kind of economic monopoly.

The purpose of the federal antitrust laws is to break up monopoly and preserve fair competition in the United States. It is a fine purpose. The wisdom and fairness of its application in particular cases is often open to challenge. But in spite of bad administration, every far-sighted businessman I know is a staunch defender of our national antitrust policy.

At present, in the exemption of labor monopoly, we have a breach in that policy which, if not closed, will soon become fatal both to the policy and the enterprise system it is designed to foster and protect.

The main thing wrong today with Great Britain and indeed all Europe is that no effective antitrust laws are in existence to protect the public from business and labor monopolies, to guarantee personal freedoms. No free economy in Europe or America can prosper as long as protected monopolies remain and flourish.

While your representatives in Congress are home with you, talk to them about the special privileges now granted to labor union monopoly. You would serve your country well by finding out what they intend to do about it before it is too late.

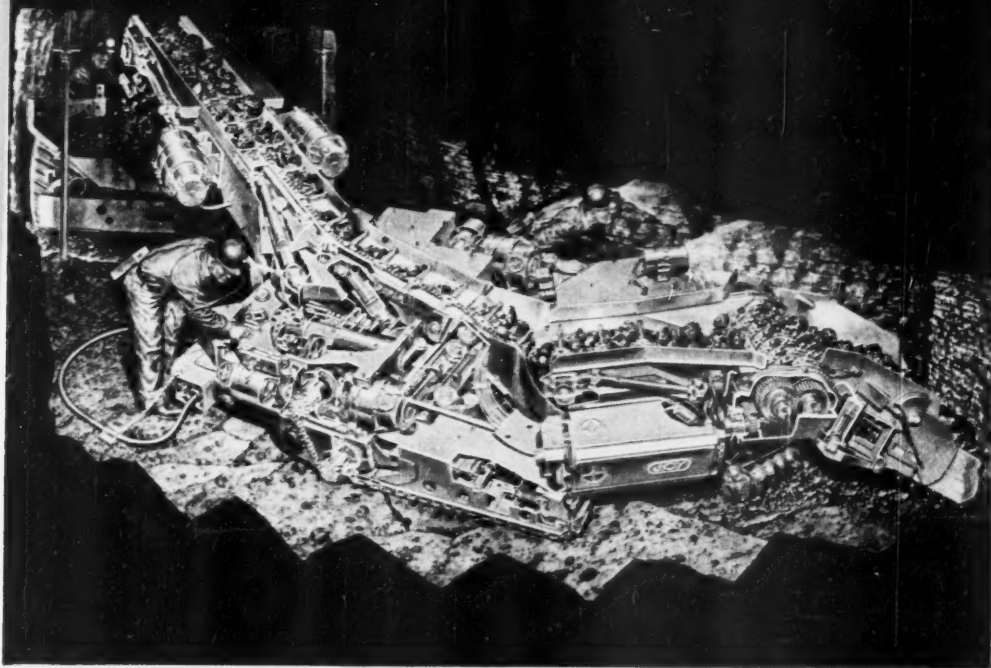


President, McGraw-Hill Publishing Company, Inc.

This is the 79th in my series of editorial messages.

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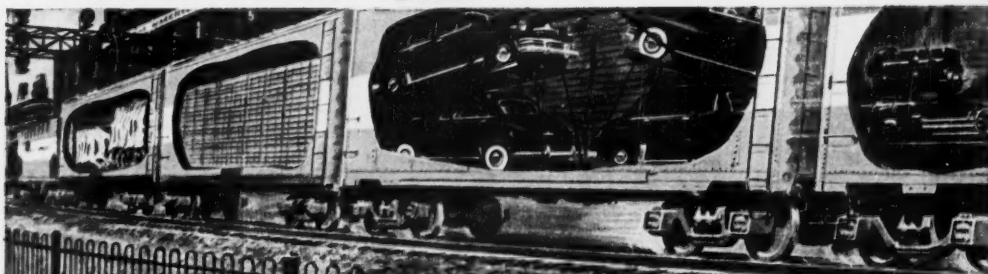
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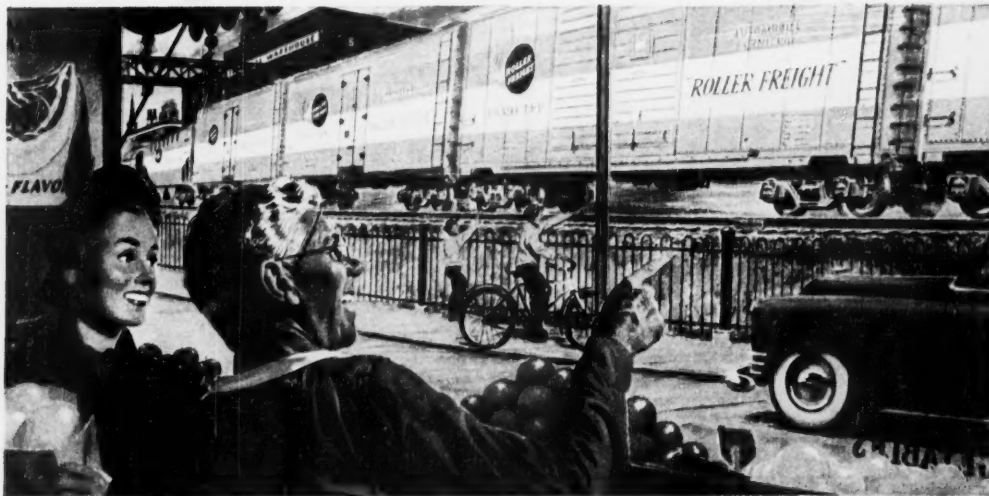
There's sure to be *something* inside this freight train on its way to you — because

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And now, to bring you these things faster and in better condition, the next great step in railroading will be "Roller Freight".

Railroads are starting to equip their freight cars with the same roller bearings that have made possible the high speed efficiency of today's automobiles, machine tools and other industrial equipment.

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Here's another example of the American idea at work. Faster schedules for shippers. Better service for consumers. Savings for the railroads. Greater opportu-

nity for everyone to make the profits that make America's wheels go round.

Today more and more railroads are switching to "Roller Freight", from a handful of cars in some cases to as many as 800 cars for one and 1000 for another.

Throughout all industry, Timken bearings are first choice wherever wheels and shafts turn because they take the heavy radial and thrust loads in any combination and permit higher speeds. Look for the trade-mark "Timken" on the bearings. The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO". Tapered Roller Bearings, Alloy Steels and Tubing, Removable Rock Bits.



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